

HE
18.5
.A37
no.
DOT-
TSC-
UMTA-
85-14
Department
of Transportation
Class
Transportation
Administration

Transit Fare Prepayment Distribution Methods in Sacramento, CA

UMTA/TSC Evaluation Series

Final Report
June 1985



NOTICE

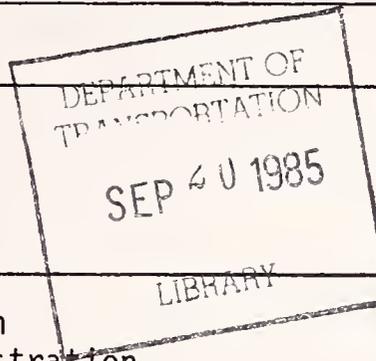
This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

NOTICE

The United States Government does not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the object of this report.

AE
18.5
.A37
no.
DOT-
TSC-
UMTA-
85-14

1. Report No. UMTA-CA-06-0102-85-1		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle TRANSIT FARE PREPAYMENT DISTRIBUTION METHODS IN SACRAMENTO, CA			5. Report Date June 1985		
			6. Performing Organization Code DTS-64		
7. Author(s) David Reinke			8. Performing Organization Report No. DOT-TSC-UMTA-85-14		
9. Performing Organization Name and Address Crain and Associates, Inc.* 343 Second St., Suite A Los Altos, CA 94022			10. Work Unit No. (TRAIS) UM527/R5631		
			11. Contract or Grant No. DOT-TSC-1755		
12. Sponsoring Agency Name and Address U.S. Department of Transportation Urban Mass Transportation Administration Office of Technical Assistance Washington, DC 20590			13. Type of Report and Period Covered Final Report April 1981 - Sept. 1984		
			14. Sponsoring Agency Code URT-30		
15. Supplementary Notes *Under contract to:		U.S. Department of Transportation Research and Special Programs Administration Transportation Systems Center Cambridge, MA 02142			
16. Abstract This demonstration tested the use of new methods to distribute transit fare prepayment (TFP) instruments at the Sacramento Regional Transit District (RT). Five new distribution methods were implemented to supplement a network of public, private, and school sales outlets: 1) mail order, 2) direct telephone order, 3) automatic telephone payment (direct bill paying by telephone), 4) pre-authorized funds transfer from checking accounts, and 5) vending machines that dispense ticket strips. Implementation of the new methods was staged, so that each new method was implemented on top of a growing base program; each method could then be evaluated on its own merit and on the effect of its introduction on the existing distribution system. The costs, benefits, and patronage of each method, as well as the procedures used in its administration, were analyzed. Planning and implementation of the new methods, except for vending machines, proceeded with few problems; the methods are workable, and their users are satisfied with the service. Continuing mechanical problems with the vending machines have made them unreliable, and their use is low. The new methods account for about 3% of RT's total TFP sales. Most users of the new methods had previously purchased TFP instruments through sales outlets. There has been no discernible effect on total patronage on RT. The new methods are less cost-effective than the sales outlets: their operating costs range from 14% to almost 50% of their revenues, while outlet operating costs are less than 3% of their revenues.					
17. Key Words Fare Collection, Transit Fare Prepayment, Demonstration, Vending Machines			18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, VA 22161		
19. Security Classif. (of this report) UNCLASSIFIED		20. Security Classif. (of this page) UNCLASSIFIED		21. No. of Pages 226	22. Price



PREFACE

This is a report on the results of implementing five new transit fare prepayment distribution methods in Sacramento, California. The results described here cover the demonstration from April 1981 through September 1984.

This report has been prepared for the Transportation Systems Center. Michael Couture and Larry Doxsey were the TSC evaluation managers for the demonstration. Stewart McKeown was the UMTA project manager.

The staff of the Fare Prepayment Department at the Sacramento Regional Transit District (RT) were enthusiastically cooperative, especially Beth Beach (Fare Prepayment Supervisor), the original project manager at RT,¹ and Becky Wah, her successor.

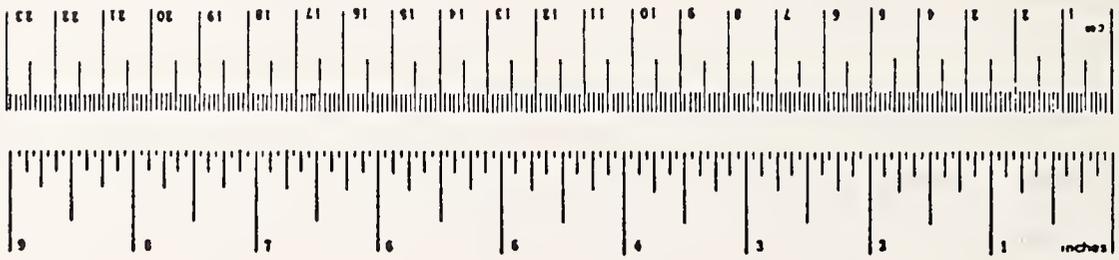
David Reinke of Crain & Associates, Inc. was the project manager for the evaluation. George Rhyner provided major support for the cost analysis; Charlie Cutten worked on the design and analysis of the surveys; David Koffman reviewed the draft final report. The evaluation plan was written by Rex Gephart and David Koffman. The draft report was typed by Molly Hughes; and the final report by Kathy Lunde, Madeline St. Pierre, and Pam Molstad.

¹Now with ATE Enterprises, Inc., Cincinnati, Ohio.

METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
AREA				
sq in	square inches	6.5	square centimeters	cm ²
sq ft	square feet	0.09	square meters	m ²
sq yd	square yards	0.8	square meters	m ²
sq mi	square miles	2.6	square kilometers	km ²
ac	acres	0.4	hectares	ha
MASS (weight)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
VOLUME				
tblsp	tablespoons	5	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	Cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
cu ft	cubic feet	0.03	cubic meters	m ³
cu yd	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
km	kilometers	0.6	miles	mi
AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.5	acres	ac
MASS (weight)				
g	grams	0.036	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	st
VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (exact)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F

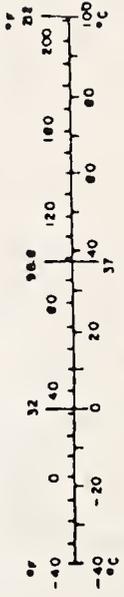


TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1.	INTRODUCTION	1
1.1	DEMONSTRATION OVERVIEW	1
1.2	ORGANIZATIONAL ROLES	2
1.3	EVALUATION OBJECTIVES AND ISSUES	3
1.4	EVALUATION OVERVIEW	4
2.	DEMONSTRATION SETTING	9
2.1	GEOGRAPHIC AND DEMOGRAPHIC CHARACTERISTICS	9
2.2	PUBLIC TRANSPORTATION	9
2.2.1	Operations--1973 to 1981	9
2.2.2	Fare Structure--1973 to 1981	13
2.2.3	Operational Changes During the Demonstration	14
2.2.4	Fare and Revenue Changes During the Demonstration	16
2.3	EXOGENOUS EVENTS	22
2.3.1	Fare Changes	22
2.3.2	Fare Prepayment Department Organizational Changes	22
2.3.3	Decline in RT Patronage	23
3.	PLANNING AND IMPLEMENTATION	25
3.1	SCHEDULE OF EVENTS	25
3.2	FARE PREPAYMENT DEPARTMENT ORGANIZATION	26
3.3	DESCRIPTION OF PRE-EXISTING TFP OPTIONS	28
3.3.1	Background	28
3.3.2	Over-the-Counter Outlets	29
3.3.3	Employer-Based Outlets	30
3.4	DIRECT MAIL ORDER	33
3.4.1	Description	33
3.4.2	Planning and Implementation	35
3.5	DIRECT TELEPHONE ORDER	36
3.5.1	Description	36
3.5.2	Planning and Implementation	38

TABLE OF CONTENTS (CONT)

<u>Section</u>	<u>Page</u>
3.6	AUTOMATIC TELEPHONE PAYMENT 39
3.6.1	Description 39
3.6.2	Planning and Implementation 41
3.7	PRE-AUTHORIZED FUNDS TRANSFER 44
3.7.1	Description 44
3.7.2	Planning and Implementation 46
3.8	VENDING MACHINES 48
3.8.1	Description 48
3.8.2	Planning and Implementation 49
3.9	TICKETS 52
4.	DEMAND 53
4.1	PATRONAGE 53
4.1.1	Orders 53
4.1.2	Sources of Revenue 56
4.1.3	Sources of Customers 60
4.1.4	Markets for the New TFP Distribution Methods 65
4.2	USER CHARACTERISTICS AND ATTITUDES 66
4.2.1	Travel and Socioeconomic Characteristics 66
4.2.2	Attitudes Toward TFP Distribution Methods 66
4.2.3	Effects of Eliminating TFP Distribution Methods 71
4.3	NONUSER CHARACTERISTICS, AWARENESS, AND ATTITUDES 74
4.3.1	Characteristics and Attitudes of Non-TFP Users 74
4.3.2	Awareness and Attitudes of TFP Users 77
4.3.3	Characteristics, Awareness, and Attitudes of Former Users 79
4.3.4	Persons Who Inquired About the New Methods 79

TABLE OF CONTENTS (CONT)

<u>Section</u>		<u>Page</u>
5.	LEVEL OF SERVICE	87
5.1	USER COST	87
5.2	USER EFFORT	87
5.3	TURNAROUND TIMES	89
5.4	RELIABILITY	89
6.	COSTS AND COST EFFECTIVENESS	93
6.1	DEMONSTRATION COSTS	93
6.2	COST, PRODUCTIVITY, AND COST EFFECTIVENESS	93
6.2.1	Analysis Method	93
6.2.2	Startup Costs	95
6.2.3	Operating Costs	98
6.2.4	Productivity	105
6.2.5	Cost Effectiveness	107
6.3	IMPROVING PRODUCTIVITY AND COST EFFECTIVENESS	109
6.3.1	Adjustment of the TFP Distribution Network	109
6.3.2	Improvements to Current Department Operations	110
7.	SUMMARY AND CONCLUSIONS	111
7.1	FINDINGS	112
7.1.1	Planning and Implementation	112
7.1.2	User Response	113
7.1.3	Costs, Productivity, and Cost Effectiveness	114
7.2	CONCLUSIONS	115
7.3	TRANSFERABILITY OF RESULTS	116

APPENDICES

Appendix

A	OPERATING PROCEDURES FOR TFP DISTRIBUTION METHODS	A-1
B	DATA COLLECTIONS	B-1

LIST OF ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
2-1	RT SERVICE AREA	10
2-2	MONTHLY PASSES AND STAMPS	17
2-3	PHOTO ID CARDS	17
2-4	TICKETS SOLD BY RT	18
2-5	VENDING MACHINE TICKETS	18
3-1	OUTLET MONTHLY PASS AND STAMP ORDER FORM	31
3-2	OUTLET TICKET ORDER FORM	31
3-3	SAMPLE OUTLET INVOICE	32
3-4	MAIL ORDER FORM	33
3-5	CUSTOMER PURCHASE RECORD	34
3-6	TELEPHONE ORDER RECORDING FORM	37
3-7	ATP BANK STATEMENT	40
3-8	PAFT DEBIT AUTHORIZATION FORM	45
4-1	MAIL AND TELEPHONE ORDERS	54
4-2	ATP AND PAFT ORDERS	55

LIST OF ILLUSTRATIONS (CONT)

<u>Figure</u>		<u>Page</u>
B-1	SALES AND REVENUE REPORT	B-2
B-2	FARE PREPAYMENT EXPENSE REPORTS	B-4
B-3	MONTHLY PROGRESS REPORT	B-5
B-4	HOURS AND COST REPORT	B-6
B-5	MONTHLY PASS AND STAMP SALES REPORT	B-8
B-6	TICKET SALES REPORT	B-9
B-7	PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - MONTHLY PASS USERS	B-10
B-8	PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE-TICKET USERS.....	B-12
B-9	PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - DAILY PASS USERS	B-14
B-10	PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - CASH USERS	B-16
B-11	INTERIM MAIL ORDER SURVEY QUESTIONNAIRE - MONTHLY PASS BUYERS	B-19
B-12	INTERIM MAIL ORDER SURVEY QUESTIONNAIRE - TICKET BUYERS	B-21
B-13	MAIL ORDER INQUIRY SURVEY	B-23
B-14	INTERIM TELEPHONE ORDER SURVEY QUESTIONNAIRE - MONTHLY PASS BUYERS	B-24
B-15	INTERIM TELEPHONE ORDER SURVEY-TICKET BUYERS.....	B-26
B-16	POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - MONTHLY PASS USERS	B-28
B-17	POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE-TICKET USERS.....	B-30
B-18	POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - DAILY PASS USERS	B-32
B-19	POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - CASH USERS	B-34
B-20	POST-IMPLEMENTATION TELEPHONE SURVEY QUESTIONNAIRE	B-38

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1-1	EVALUATION ISSUES 5
1-2	TFP DISTRIBUTION METHODS EVALUATED 7
2-1	POPULATION, EMPLOYMENT, AND INCOME OF THE SACRAMENTO REGION, 1980 11
2-2	VEHICLE OWNERSHIP AND WORK TRAVEL, 1980 12
2-3	SACRAMENTO REGIONAL TRANSIT DISTRICT OPERATING STATISTICS, FY 1981-1984 15
2-4	RT PERFORMANCE MEASURES, FY 1981-1984 16
2-5	FARE STRUCTURE CHANGES DURING THE DEMONSTRATION . . . 19
2-6	MONTHLY PASS/STAMP SALES, FY 1981-1984 20
2-7	FAREBOX REVENUE BY SOURCE, FY 1981-1984 21
3-1	CHRONOLOGY OF MAJOR EVENTS IN DEMONSTRATION 26
3-2	RT FARE PREPAYMENT DEPARTMENT - STAFF POSITIONS 27
3-3	CHRONOLOGY OF EVENTS--DIRECT MAIL ORDER 35
3-4	HOW RT PATRONS HEARD ABOUT MAIL ORDER 36
3-5	CHRONOLOGY OF EVENTS--DIRECT TELEPHONE ORDER 38
3-6	CHRONOLOGY OF EVENTS--AUTOMATIC TELEPHONE PAYMENT 41
3-7	CHRONOLOGY OF EVENTS--PAFT 47
3-8	CHRONOLOGY OF EVENTS--VENDING MACHINES 49
3-9	CHRONOLOGY OF EVENTS--TICKETS 52
4-1	ITEMS SOLD BY DISTRIBUTION METHOD 57
4-2	REVENUE BY DISTRIBUTION METHOD 58
4-3	REVENUES BY TFP TYPE AND DISTRIBUTION METHOD--1983 59
4-4	FORMER METHOD OF FARE PAYMENT--MAIL ORDER AND TELEPHONE ORDER USERS 61
4-5	FORMER TFP PURCHASE METHOD--MAIL ORDER AND TELEPHONE USERS WHO PREVIOUSLY PURCHASED PASSES OR TICKETS 63
4-6	PERCENTAGE OF OUTLET SALES BY TYPE OF OUTLET--1983 64
4-7	CHARACTERISTICS OF TFP USERS 67

LIST OF TABLES (CONT)

<u>Table</u>	<u>Page</u>
4-8	REASONS FOR USE OF MAIL ORDER AND TELEPHONE ORDER 69
4-9	DESIRED CHANGES TO SERVICE--MAIL ORDER AND TELEPHONE ORDER USERS 70
4-10	EXPECTED FARE PAYMENT METHOD OF CURRENT TFP USERS IF CURRENT TFP DISTRIBUTION METHOD NOT AVAILABLE 72
4-11	EXPECTED DIVERSION OF CURRENT TFP USERS TO OTHER TFP DISTRIBUTION METHODS IF CURRENT TFP DISTRIBUTION NOT AVAILABLE 73
4-12	RT PASSENGER CHARACTERISTICS BY METHOD OF FARE PAYMENT 75
4-13	AWARENESS OF TFP METHODS BY RT RIDERS 76
4-14	REASONS FOR NOT USING TICKETS 76
4-15	AWARENESS OF NEW TFP DISTRIBUTION METHODS AMONG RT RIDERS 78
4-16	AWARENESS OF NEW TFP DISTRIBUTION METHODS AMONG TFP USERS 80
4-17	PERCEIVED DISADVANTAGES OF NEW TFP DISTRIBUTION METHODS 81
4-18	CHARACTERISTICS AND ATTITUDES OF FORMER MAIL ORDER AND TELEPHONE ORDER USERS 82
4-19	CHARACTERISTICS OF PERSONS WHO INQUIRED ABOUT MAIL ORDER SERVICE BUT DID NOT USE IT 86
5-1	RANKING OF DISTRIBUTION OPTIONS BY LEVEL OF CONSUMER EFFORT 88
5-2	MINIMUM PROCESSING TIME OF CONSUMER ORDERS BY DISTRIBUTION METHOD 90
5-3	LENGTH OF TIME TO RECEIVE ORDER - MAIL ORDER AND TELEPHONE ORDER USERS 91
5-4	RANKING OF DISTRIBUTION OPTIONS BY DEGREE OF RELIABILITY 92
5-5	RELIABILITY OF MAIL ORDER AND TELEPHONE ORDER SERVICE FOR PASS PURCHASERS 92

LIST OF TABLES (CONT)

<u>Table</u>		<u>Page</u>
6-1	DEMONSTRATION EXPENDITURES	94
6-2	OPERATING COST COMPONENTS OF TFP DISTRIBUTION METHODS	96
6-3	START-UP LABOR	97
6-4	START-UP COSTS	97
6-5	BURDENED OPERATING EXPENSES	99
6-6	OPERATING SUMMARY--OUTLETS	100
6-7	OPERATING SUMMARY--MAIL ORDER	101
6-8	OPERATING SUMMARY--TELEPHONE ORDER.....	102
6-9	OPERATING SUMMARY--ATP	103
6-10	OPERATING SUMMARY--PAFT	104
6-11	1983 PRODUCTIVITY STATISTICS FOR TFP DISTRIBUTION METHODS	106
6-12	COST EFFECTIVENESS OF TFP DISTRIBUTION METHODS	108

EXECUTIVE SUMMARY

DEMONSTRATION DESCRIPTION

This project was conducted by the Sacramento Regional Transit District (RT) to test the use of new methods to distribute monthly passes and tickets. These methods were implemented on top of an existing system of over-the-counter, school, and employer outlets for distributing transit fare prepayment (TFP) items: monthly passes and tickets. The demonstration included a switchover from tokens to tickets so that single-ride fare prepayment items could be sent through the mail. Five new distribution methods were tested:

1. Direct mail order. Users can order passes and tickets through the mail.
2. Direct telephone order. Users can call in their orders and pay with a credit card. Orders will then be mailed directly to the purchaser.
3. Automatic telephone payment (ATP). Pass and ticket purchasers can use existing automated telephone billpayer services by opening an account with a bank or financial institution that offers these services. Payment is automatically transferred to RT, and RT mails the purchaser the order.
4. Pre-authorized funds transfer (PAFT). Pass and ticket purchasers can have standing orders that are processed monthly. Their accounts are automatically debited and the orders are mailed out by RT.
5. Vending machines. Users can purchase strips of tickets at three vending machine locations in the RT service area.

Each method was evaluated on its own merit and on the effect of its introduction on the existing distribution system.

PLANNING AND IMPLEMENTATION

The new methods were planned and implemented over a three-year period. A planning phase and a marketing campaign preceded the implementation of each method.

Planning and implementation of mail order and telephone order were carried out with few problems. The marketing campaign for each consisted of newspaper

advertisements, posters at outlets, signs and posters on buses, and radio advertisements.¹ Each campaign ran for a two-week period immediately before the new TFP distribution method became available to customers. RT staff believe in retrospect that the marketing campaign for telephone order was carried out too early in the month; the one-week gap between the end of the campaign and the deadline for ordering passes for the next month contributed to the low response to the program.

ATP was more difficult to plan and implement because RT had trouble finding financial institutions who were willing to participate and who had a sufficient number of depositors in the RT service area. ATP has the advantage that RT does not have to worry about invalid checks or credit cards: payment is automatically received before the items are sent out.

PAFT requires a financial institution that is a member of the local automated clearing house (ACH) to act as the originating financial institution for account debits. This method is by far the easiest of the new methods for RT to operate because so much of the record keeping and payment is automated. But there have been problems with accounts that have been closed or have insufficient funds; there is usually a long delay before RT is made aware of the problem, and RT is then responsible for collection.

The vending machines had a long lead time for planning and implementation because there was no machine on the market that met RT's requirements. The original plan was to purchase eight machines, but the amount in the grant was sufficient to purchase only three machines. There have been continual problems with the bill handling mechanisms in the machines, and patronage remains low.

USER RESPONSE

The new methods have generated only a small amount of patronage. Mail order and telephone order patronage decreased after the methods were first introduced, but increased late in 1983 after RT began marketing them again. By the end of 1983 the

¹The telephone order marketing campaign included television advertisements.

number of orders per month was about 220 for mail order and 50 for telephone order. ATP and PAFT patronage also increased to 4 and 18 orders per month, respectively.

Users of the new TFP distribution methods are for the most part persons who had already been TFP users who purchased monthly passes and tickets from public outlets. Some users, however, have switched their method of fare payment or began to ride RT when they began to use the new methods. In general, the new methods appear to compete primarily with public outlets rather than with each other. They have had little effect on attracting new TFP users. There has been no discernable effect on RT patronage.

Users of the new methods are well pleased with the service. Passes are seldom received after the first of the month. The average times from order to delivery are about 5 days for mail order, 2 days for telephone order, and between 5 and 10 days for ATP; PAFT requires a two-month lead time for the initial order, but the order is then processed automatically each month thereafter.

Lack of an ongoing marketing program has contributed to the decline in patronage through the new methods. There has, until recently, been no follow up to the initial marketing campaigns, and thus no way to make up for natural attrition in patronage by informing potential new users of the methods. Recent limited marketing efforts appear to have generated new customers.

COST EFFECTIVENESS OF THE METHODS

The cost effectiveness of the methods was measured by their operating expenses as a percentage of revenues received. Outlets remain the most cost-effective method (1.9% for monthly passes and 2.9% for tickets). Mail order (14.4%) is the most cost-effective of the new methods, followed by telephone order (25.4%), PAFT (25.8%) and ATP (28.2%). These figures are based on patronage during 1983; increases in sales through ATP and PAFT in the latter part of 1983 have made these methods more cost-effective.²

²Bank of America has since sharply increased its charges for PAFT. Operating costs are now about half of revenues.

The new distribution methods would probably be more cost-effective if TFP use were higher. PAFT certainly has economies of scale because its fixed operating costs are high. But given current levels of TFP sales at RT, the cost effectiveness of the new distribution methods cannot be expected to approach that of the outlet distribution network.

The operating cost percentage for telephone order cannot be less than 5% because of the credit card discount fee on all orders; with higher patronage, the percentage might drop to as low as 15%. The figure for ATP is very uncertain because it is based on only 4 orders per month; but it is reasonable to expect that it also would be more cost-effective if sales were to increase.

Total RT Fare Prepayment Department costs would be unaffected if RT were to drop telephone order, ATP, and PAFT, its least cost-effective methods. The same staff size would be needed to handle current outlet and mail order sales. There would, however, probably be some economies to RT if the least cost-effective methods were dropped, because RT fare prepayment staff would have more time available to carry out duties for other departments in RT.

There appears to be no interaction among the new methods. Introduction of a new method appears to have had no noticeable effect on the operating costs of the methods that were already in place.

CONCLUSIONS

Four of the new TFP distribution methods -- mail order, telephone order, ATP, and PAFT -- are clearly workable. There were few problems with implementing them, and they are well-liked by their users. These methods provide useful alternatives to outlets for their users. They have increased the coverage of RT's TFP distribution, and have probably partially alleviated the effects of declines in the number of sales outlets.

There would be no significant cost savings from dropping the least cost-effective of the new distribution methods because the same number of persons would be needed to operate outlets and mail order service. RT would realize some savings to the extent that fare prepayment staff can be used to do work for other departments

within RT. But the only way to reduce fare prepayment staff size would be to discontinue all of the new TFP distribution methods.

The larger issue is whether any of the new distribution methods should be continued. There have been some benefits to users of the methods, notably increased convenience in purchasing monthly passes and tickets. But most of these users were already TFP users; and the overwhelming majority of them would continue to purchase passes or tickets through outlets if the new methods were discontinued. The benefits to users do not, therefore, appear to be very significant.

There appear to be no significant benefits to RT from the new distribution methods. TFP use has not been significantly increased, and total patronage on the RT system has been unaffected. It therefore appears that, from RT's viewpoint, the benefits of the new methods do not even closely approach their costs. Even the low-volume sales outlets appear to be more efficient than the new methods. This finding indicates that RT's current policy of dropping low-volume outlets from its sales network may not be cost-effective.

The demonstration results are timely for RT in view of its future because self-service fare collection will be used for the new light rail system. RT must therefore consider how it will distribute TFP items for the rail system. RT's experience with the existing TFP distribution network can serve as a useful basis for planning a TFP distribution network for when the rail system begins operations.

Transferability of the results to other areas will depend on the level of TFP sales at other transit agencies. Transit operators with significantly higher volumes of TFP sales should expect greater cost effectiveness from mail order, telephone order, ATP, and PAFT than was achieved at RT. PAFT would be cost-effective if sales volumes were more than about 100 orders per month because of the small amount of labor involved. Mail order may be a useful method for transit properties with lower TFP sales than RT if sales outlets are difficult to establish. ATP may be used more in metropolitan areas where bill paying by telephone is more common than in Sacramento, such as in Los Angeles. But telephone order, ATP, and PAFT would not be cost-effective for smaller operators because sales would be too low.

The results of this demonstration are particularly timely in view of the growing interest of transit operators in self-service fare collection. If they are not to rely

solely on vending machines, these properties will have to consider alternative means to distribute TFP instruments. The results of the experience in Sacramento should provide other transit operators, especially those with high TFP sales, some insights into how these methods work, how they can be implemented, and how cost effective they are likely to be.

I. INTRODUCTION

This is a report on the evaluation of a federally-sponsored demonstration to test alternative methods of distributing transit fare prepayment items.

I.1 DEMONSTRATION OVERVIEW

The Sacramento Regional Transit district (RT) conducted a demonstration project concerning different distribution techniques for transit fare prepayment (TFP) items. The demonstration project consisted of two phases:

1. Pre-implementation planning and design. The new TFP distribution methods were planned and designed. Cost data were collected on the two existing fare prepayment distribution methods: over-the-counter outlets and employer based outlets.
2. Implementation. The new distribution methods were implemented one at a time. There were several months between the implementation of successive methods to allow the assessment of the effects of each new method on the existing TFP distribution system.

A third and final phase, review and adjustment, was to be included to provide a period of time during which changes could be made to the distribution program. Its purpose was to implement a cost-effective distribution network in Sacramento. As will be discussed later, this phase has not been done because of low sales volumes through the new distribution methods.

In late 1977, RT embarked on an earlier transit fare prepayment (TFP) demonstration in which the primary innovation was the sale of monthly transit passes through employers. The demonstration, which was implemented by RT under a grant from the Urban Mass Transportation Administration (UMTA) Service and Methods Demonstration (SMD) program, had an organizational phase which began in October 1977, with the solicitation of employers in March 1978, and a two-year distribution phase beginning in June 1978. During the distribution phase, employers who decided to participate in the demonstration served as workplace outlets for the purchase of monthly transit passes by employees. The demonstration ended in June 1980.

RT's promotion of employer-based sales of passes emphasized the convenience to employees of pass purchase through their employers; it also urged employers to establish a payroll-deduction plan for pass purchase and suggested that employers subsidize the purchase of passes by employees as a means of reducing their costs for employee parking. The primary demonstration objective was to "test the impact on pass sales and thereby transit riding of various methods of marketing monthly passes through employers... The ultimate goal (was) to increase transit ridership (revenues) through extended availability of prepaid passes."¹

In May 1980, RT applied to the U.S. Department of Transportation for a grant of \$384,350 under Section 6 of the Urban Mass Transportation Act of 1964, as amended. The intent of the grant was to determine the cost effectiveness of different methods of distributing transit fare prepayment plans. Under the terms of the application, RT would contribute \$57,653, or 15% of the demonstration budget. Grant approval was received from UMTA during September 1980. The duration of the project was 4 years, from September 1980 through September 1984.

1.2 ORGANIZATIONAL ROLES

The Sacramento demonstration was organized as follows. The Service and Methods Demonstration (SMD) Division of the Urban Mass Transportation Administration (UMTA) was responsible for the demonstration. The Transportation Systems Center (TSC) of the U.S. Department of Transportation was responsible for the project's evaluation. Crain & Associates, Inc. was selected by TSC to provide the evaluation design, assist in the collection and transmittal of data for use in the evaluation, and prepare the evaluation reports. Ecosometrics, Inc. provided technical assistance to UMTA/SMD in demonstration design and management.

As the grantee, RT had budgetary and management control of the demonstration and responsibility for contract administration. RT was also responsible for the proper

¹Sacramento Regional Transit District, Demonstration Application Program Narrative, Sacramento, California, November 24, 1976: 2.

implementation of the distribution methods and for the collection and transmittal of necessary data.

The day-to-day administration of the project was the responsibility of the Fare Prepayment Manager, who managed all fare prepayment activities and had a staff of assistants. This position was held by Ms. Beth F. Beach, who was project administrator of the previous employer-promoted fare prepayment demonstration,² and she also acted as the contact person to UMTA, TSC, Crain & Associates, and all other parties involved in this demonstration project.

1.3 EVALUATION OBJECTIVES AND ISSUES

The evaluation addressed two general goals:

1. To inform the transit industry on transit fare prepayment distribution methods and present guidelines on their selection.
2. To design a cost-effective program in Sacramento as an example of efficient fare prepayment distribution.

The goals were further elaborated as a set of demonstration objectives in the management plan:³

Principal Objectives

- i) to obtain and summarize information on the fixed and incremental costs of setting up, operating, and administering different distribution methods;
- ii) to obtain information on sales revenues and identify their sources, whether from other distribution methods, cash payment, other fare prepayment plans, or new travel (i.e., other modes);

²Effective April 1983, Beth Beach left RT. Becky Wah is the new Fare Prepayment Manager.

³Patrick D. Mayworm, Armando M. Lago, and Beth F. Beach, "A Comprehensive Demonstration of Distribution Systems for Transit Fare Prepayment; The Sacramento Regional Transit Project," report prepared by Ecosometrics, Inc. for U.S. Department of Transportation, Office of Service and Methods Demonstration, Pricing Policy Division, February 11, 1981: 9-10.

- iii) to obtain and summarize information on the market profiles of the users of each fare prepayment distribution method, identifying the diversions from other distribution methods and the methods that attract new riders, if any; and
- iv) to provide a cost-effectiveness analysis of each method and identify the factors that affect the cost-effectiveness and success of each distribution method.

Secondary Objectives

- i) to assess the compatibility of different transit fare prepayment distribution methods;
- ii) to assess the factors that affect consumer choice of a distribution method and prepayment plan; and
- iii) to analyze the administration and management of each fare prepayment distribution method.

To meet these evaluation objectives, UMTA and TSC formulated a number of more specific research questions, referred to here as evaluation issues. These issues, and the chapters or sections in which they are addressed, are shown in Table I-1. As discussed in appropriate sections of this report, it was not possible to answer all of these research questions in this demonstration.

I.4 EVALUATION OVERVIEW

As transit authorities throughout the nation anticipate significant decreases in non-farebox revenues within the near future, many are taking a closer look at their operations and fare policies with the same goal that was defined in Sacramento's first TFP demonstration--to increase patronage or revenues. But in the first Sacramento TFP demonstration, and in similar efforts by other transit properties, it was estimated that the TFP program caused little, if any, additional patronage on RT.⁴ Hence, attracting new users and revenue was not considered to be an important issue.

⁴Douglas Daetz and Michael Holoszyk, Sacramento Transit Fare Prepayment Demonstration, report prepared by SYSTAN, Inc. for U.S. Department of Transportation, Transportation Systems Center, Report No. UMTA-CA-06-0102-80-1, July 1981.

TABLE I-1
EVALUATION ISSUES^a

Planning and Implementation (Chapter 3)

How efficiently can the new distribution methods be administered? What things affect the efficient operation and management of each new distribution method, and how do these change over time in response to demand changes?

User Response (Chapter 4)

What are the effects on revenue and sales of introducing each new distribution method?

What are the sources of these revenues? Are they diverted from other distribution methods or cash payment, or are there new revenues generated to the transit system?

Who uses each new distribution method, and which fare prepayment items do they purchase?

Which distribution methods are compatible and which methods compete for the same market?

What are the primary determinants of consumer choice of a distribution method and fare prepayment item?

Level of Service (Chapter 5)

What is the direct cost of a distribution method to its users?

What effort is required of the users of each distribution method?

What are the turnaround times of the distribution methods?

How reliable is each distribution method?

Costs and Cost Effectiveness (Chapter 6)

What are the full fixed and incremental costs of setting up, operating, and administering different prepayment distribution methods?

^aSee David Koffman, Rex Gephart, and David Reinke, A Demonstration of Transit Fare Prepayment Distribution Methods in Sacramento, California - Evaluation Plan, report prepared by Crain & Associates, Inc., for U.S. Department of Transportation, Transportation Systems Center, July, 1981.

TABLE I-1 (CONT)
EVALUATION ISSUES

Costs and Cost Effectiveness (Chapter 6, cont.)

What are the marginal costs of offering each new distribution method?

Which distribution methods are cost-effective and what things affect the cost effectiveness and success of each method?

Is it cost-effective to operate distribution methods that appear to compete for the same market?

What guidelines should be followed on the proper selection of distribution methods?

The evaluation of the Sacramento demonstration project, in which five fare pre-payment distribution methods were introduced sequentially, analyzed the costs, benefits, and markets of each method. Table I-2 presents a list of the five distribution methods (including the two existing distribution methods), their methods of payment, and the agencies involved. The first two constitute the base, or existing distribution program in Sacramento. These were evaluated with operating cost, sales, and revenue data collected throughout the project. The remaining five techniques were implemented sequentially, each technique building upon a growing base program. Each technique could therefore be evaluated on its own merit and on the effect of its introduction on the existing distribution system.

The first phase of the demonstration consisted of all pre-implementation planning and design activities. The project staff in Sacramento examined each distribution method and identified the specific tasks required for introduction and operation of each method. A ticket program was designed to replace the existing tokens and was implemented before the operational phase began. Data on the costs, sales, and revenue of the existing distribution methods--over-the-counter and employer-based outlets--were collected.

During the second phase, five new distribution methods were introduced sequentially into the RT system. A period of several months was allowed following the introduction of each new method before the subsequent distribution method was implemented. Cost data, sales and revenue data, and user data were collected throughout this phase for each TFP distribution method.

TABLE I-2
TFP DISTRIBUTION METHODS EVALUATED

EXISTING DISTRIBUTION METHODS (evaluated together)

1. Over-the-counter outlets. All fare prepayment plans may be purchased in person. RT has an extensive over-the-counter network.
2. Employer-based outlets. Employees can purchase monthly passes (and tickets during the demonstration) directly at the work place. Passes may be purchased each month or automatically deducted from the individual's pay-check via payroll deduction.

NEW DISTRIBUTION METHODS

1. Direct mail order. Users can order passes and tickets through the mail.
2. Direct telephone order. Users can call in their orders and pay with a credit card. Orders will then be mailed directly to the purchaser.
3. Automatic telephone payment (ATP). Pass and ticket purchasers can use existing automated telephone billpayer services by opening an account with a bank or financial institution that offers these services. Payment is automatically transferred to RT, and RT mails the purchaser the order.
4. Pre-authorized funds transfer (PAFT). Pass and ticket purchasers can have standing orders that are processed monthly. Their accounts are automatically debited and the orders are mailed out by RT.
5. Vending machines. Users can purchase strips of tickets at three vending machine locations in the RT service area.

A review and adjustment phase was originally included as part of the demonstration project to allow Crain & Associates and RT a period of time during which changes could be made to the distribution program. It was possible that some methods may have been dropped; while other methods may have been found efficient enough to implement separately. The purpose of this final phase was to put in place a cost-effective distribution network so that the program could continue after federal support ends, but sales volumes through the new distribution methods were too low to fine-tune the TFP distribution system.

The vending machines have been installed, but continuing mechanical problems with them have made it impossible to carry out a full evaluation. Evaluation of the vending machines has therefore been limited to a description of their planning and implementation, and RT's experience with them to date.

2. DEMONSTRATION SETTING

2.1 GEOGRAPHIC AND DEMOGRAPHIC CHARACTERISTICS

Sacramento, the capital of California, is located in the Central Valley about 90 miles northeast of San Francisco. The Sacramento Regional Transit District (RT) provides public transportation primarily to the northern part of Sacramento County, where most of the population in the county lives. Service is also provided on a contract basis to Roseville, about 20 miles to the north in Placer County. Figure 2-1 shows a map of the RT system.

A list of some population and employment characteristics of the area is presented in Table 2-1. Sacramento County has grown rapidly in the past decade, and had a population of 783,381 in 1980. The City of Sacramento, containing 275,741 persons, has a population density that is lower than the average for medium-size cities. An important characteristic of the area is the high amount of public employment. In addition to being the state capital, Sacramento is the location of two U.S. Air Force bases. The region therefore has twice the national average proportion of government workers and a relatively low percentage of jobs in manufacturing.

Personal income in the Sacramento area is higher than the national average, and automobile ownership is higher, especially outside the central city (Table 2-2). Public transit use is low compared to cities of similar size; transit patronage nearly doubled during the 1970's, but has decreased in the past several years. An extensive freeway system, part of which bounds the CBD, provides fast automobile travel; the average travel time to work is less than 20 minutes. Despite the concentration of state government jobs in the central area, much of the employment is dispersed throughout the region. Consequently, transit carries a low proportion of work trips.

2.2 PUBLIC TRANSPORTATION

2.2.1 Operations--1973 to 1981

The city-owned Sacramento Transit Authority provided public transit service within the city from 1955 to 1973. Only limited service was offered in the suburbs

RT SYSTEM MAP

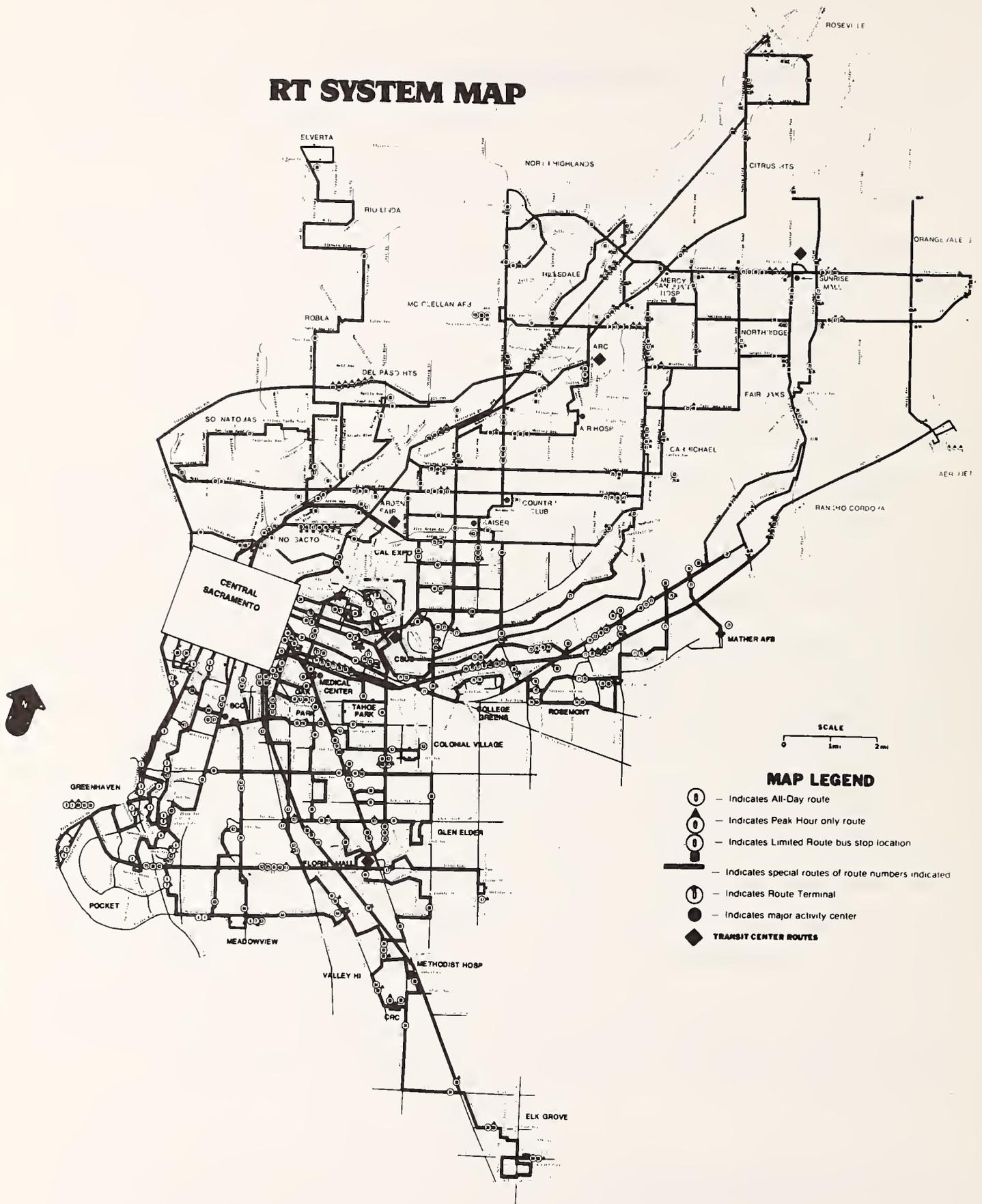


FIGURE 2-1. RT SERVICE AREA

TABLE 2-1
POPULATION, EMPLOYMENT, AND INCOME
OF THE SACRAMENTO REGION -- 1980

	<u>Sacramento</u>			
	<u>SMSA</u>	<u>County</u>	<u>City</u>	<u>U.S. SMSAs</u>
POPULATION				
Total population	1,014,002	783,381	275,741	---
% change (1970-1980)	26.2%	23.5%	7.2%	---
Area (sq. mi.)	3,402	971	96	---
Population density (per sq. mi.)	298.1	806.8	2,872.3	---
Population age groups (% of total)				
--under 18	26.7%	26.8%	24.6%	27.7%
--over 65	9.6%	9.5%	13.6%	10.7%
Median age (years)	29.7	29.8	31.4	30.0%
EMPLOYMENT				
Labor force participation ^a	62.9%	63.5%	58.6%	63.3
Government employment ^b	29.8%	30.2%	35.4%	16.8%
Employment in major industries ^b				
--Manufacturing	7.8%	7.8%	7.8%	20.1%
--Wholesale & Retail Trade	22.3%	22.9%	21.2%	20.5%
--Professional & Related Services	21.0%	19.5%	20.7%	18.5%
Workers in family ^c				
--None	14.1%	14.3%	19.6%	12.3%
--1	33.5	33.7	33.5	32.9
--2	41.5	41.2	37.0	41.8
--3 or more	10.8	10.8	9.9	13.1
MEDIAN FAMILY INCOME ^d	\$23,797	\$23,614	\$21,725	\$21,128

Source: 1980 U.S. Census.

^aPer cent of population 16 years and over.

^bPer cent of employed persons.

^cPer cent of families.

^d1979

TABLE 2-2
VEHICLE OWNERSHIP AND WORK TRAVEL, 1980

	<u>Sacramento</u>			<u>U.S. SMSAs</u>
	<u>SMSA</u>	<u>County</u>	<u>City</u>	
VEHICLES AVAILABLE ^a				
None	8.6%	9.1%	16.2%	13.9%
1	35.1	36.0	39.8	36.3
2	33.9	33.9	29.1	33.3
3 or more	22.3	21.0	14.9	16.4
MODE OF TRAVEL TO WORK ^b				
Drive alone	69.0%	69.9%	67.9%	64.6%
Carpool	17.6	18.0	17.6	19.0
Transit	3.5	4.0	5.3	8.1
Walk only	3.4	3.0	4.1	5.1
Other means	4.4	3.3	3.6	1.6
		8	1.5	1.6
Persons/private vehicle	1.13	1.13	1.13	1.15
Mean travel time to work (minutes)	19.5	19.7	17.9	22.6
WORKPLACE LOCATION ^c				
Sacramento City CBD	6.3%	7.3%	10.9%	---
Remainder of Sacramento City	39.8	47.4	64.7	---
Remainder of Sacramento County	31.5	37.6	17.7	---
Remainder of SMSA	18.3	4.5	4.3	---
Outside SMSA	4.0	3.2	2.5	---

^aPer cent of households.

^bPer cent of workers 16 years and over.

^cPer cent of workers 16 years and over who reported workplace location.

surrounding the central city. By 1973, less than half of the population of the urbanized area resided in the central city, and a regionwide transit system was needed. In response, the state legislature created the Sacramento Regional Transit District in 1973. The 385 square mile area of the district included the urbanized areas of Sacramento and Yolo Counties and the cities of Davis, Folsom, Roseville, and Woodland. Only the City and County of Sacramento participate in the governing of the district; the other areas were served on a contract basis.

RT began operations on April 1, 1973. The district expanded rapidly during the decade. In 1973, the existing transit authority operated 115 buses and carried about 6 million passengers; in 1981, RT operated 227 buses and carried 21.1 million passengers, or about 80,000 per weekday.

Between 1973 and 1981, RT substantially increased route mileage and service frequency, and implemented extensive express service between downtown Sacramento and outlying suburban areas. Two downtown shuttle services were also begun. Service more than doubled between 1973 and 1981 to 9.2 million vehicle miles.

RT operations were interrupted by a 46-day driver strike in April and May 1976 and a 19-day strike in April and May 1979.

2.2.2 Fare Structure--1973 to 1981

In 1973, the Sacramento Transit Authority had a base fare of 25 cents and zonal fares up to a maximum of 65 cents. When RT began operations in 1973, the zonal fare system was replaced by a flat fare of 25 cents, and a \$10 monthly pass and a 50 cent daily pass were introduced. The monthly pass was sold at outlets throughout the metropolitan area beginning on the 25th day of the month preceding the month of use. The daily pass was sold on board the buses. About 1,000 monthly passes were sold each month, accounting for 5 to 10 per cent of total patronage. Nearly half the remaining riders used daily passes. The monthly passes were transferable.

A general fare increase took effect on August 1, 1976. The base fare was increased to 35 cents; riders from the outlying cities of Davis, Folsom, Roseville, and Woodland were charged an additional 15 cents on inbound trips. Daily pass fares increased to 70 cents (15 cents additional for the four outlying cities). The price of the monthly pass increased to \$12 (\$3 additional for the four outlying cities). The cost of

the monthly pass was therefore equal to about 34 one-way rides, instead of 40 as it was before, and therefore represented a 12 to 14 per cent discount for the daily user (based on 40 one-way trips per month). Sales quickly tripled to almost 3,000 passes per month, and continued to increase thereafter. By the spring of 1978, when the employer-promoted demonstration began, over 4,000 passes per month were sold.

In a systemwide on-board survey in October 1977, slightly over half of all boarding passengers bought or used a daily pass. About 20 per cent used a monthly pass, and only 30 per cent paid individual cash fares. Daily and monthly pass use had both increased substantially since the previous on-board survey in May 1974, when about 6 per cent of all riders used monthly passes and about 40 per cent used daily passes.

Fares were increased again on September 1, 1979. Cash and pass fares were both raised, but the relative cost of the pass decreased to 32 one-way rides, representing a 20 per cent discount based on 40 trips per month.

2.2.3 Operational Changes During the Demonstration

At the beginning of this demonstration, RT service was oriented primarily toward the CBD, although many routes converged at four suburban shopping malls (Sunrise Mall, Florin Center, Arden Fair, and County Club Center) and California State University. About 17 per cent of all transit trips made required a transfer at these or other transfer points.

In September 1982, RT reorganized its routes in the east, with timed transfer centers at the four suburban shopping malls; the remainder of the system was reorganized for timed transfer in September 1983.

Service in Yolo County and the Folsom corridor was taken over by contract operators in January 1982. The only remaining long-distance routes in the RT system are those that serve Roseville.

RT operations have been reduced since the demonstration began. As shown in Table 2-3, route miles and service hours dropped sharply from FY 1981 to FY 1983, largely due to dropping Yolo County and Folsom corridor service; projected service hours for FY 1984 are 13 per cent below those in FY 1981. There are now 186 buses in peak service, down from 227 in FY 1981. The total number of passengers carried dropped from 21.1 million in FY 1981 to 15.8 million in FY 1983; RT estimates that

14.8 million passengers will be carried in FY 1984, a 30 per cent decrease from the FY 1981 high.

TABLE 2-3
SACRAMENTO REGIONAL TRANSIT DISTRICT
OPERATING STATISTICS, FY 1981-1984

	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>	<u>FY 1984^a</u>
Total passengers carried (millions)	21.1	18.0	15.8	14.8
Total miles operated (millions)	9.2	8.8	7.9	8.3
Total hours operated (thousands)	571	552	499	495
Operating costs (\$million)	\$25.4	\$27.5	\$24.7	\$26.0

^aProjections by RT.

Like most transit operators, RT has been plagued by rising costs and decreasing productivity (Table 2-4). Operating costs per vehicle service hour have increased by 18 per cent from FY 1981 to FY 1984, while productivity (in passengers per service hour) declined by 17 per cent. The farebox recovery rate has remained fairly constant because of fare increases in 1981 and 1983.

RT is now embarking on construction of a light rail system that will go from Watt Avenue in the north, loop through the downtown, and continue along Folsom Boulevard in the east. The estimated construction cost of the 18.3 mile system is \$131 million; operations will begin sometime in 1986.

TABLE 2-4
RT PERFORMANCE MEASURES, FY 1981-1984

	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>	<u>FY 1984^a</u>
Operating subsidy/passenger	\$0.78	\$0.95	\$1.15	\$1.29
Farebox revenue/passenger	\$0.27	\$0.37	\$0.41	\$0.47
Operating cost/passenger	\$1.05	\$1.32	\$1.57	\$1.76
Operating cost/vehicle service hour	\$44.54	\$49.81	\$49.56	\$52.48
Operating cost/vehicle service mile	\$2.67	\$2.99	\$3.11	\$3.15
Passengers/vehicle service hour	36.21	35.05	31.66	29.90
Farebox recovery ratio	26.0%	28.1%	26.3%	26.6%

Source: RT Planning Department.

^aProjections by RT.

2.2.4 Fare and Revenue Changes During the Demonstration

RT offers several methods of fare payment in addition to cash fares. Besides the regular monthly pass, RT sells a zone stamp that makes the pass valid for trips from Roseville. A photo identification card is provided to students and elderly and handicapped persons; stamps are sold to students and the elderly and handicapped; a stamp is attached to the identification card to make it serve as a monthly pass. Some examples of monthly passes, monthly stamps, and photo-identification cards are shown in Figures 2-2 and 2-3. Tickets can now be purchased and used to pay the fare in lieu of cash; these are available in 30 cent, 60 cent (regular fare) and 75 cent (peak fare) denominations (Figures 2-4 and 2-5).

There are no free or reduced-cost transfers. A passenger without a monthly pass or a daily pass must pay an additional fare each time he boards the bus. A passenger who expects to board the bus more than twice in one day can buy a daily pass when



Monthly Pass \$30

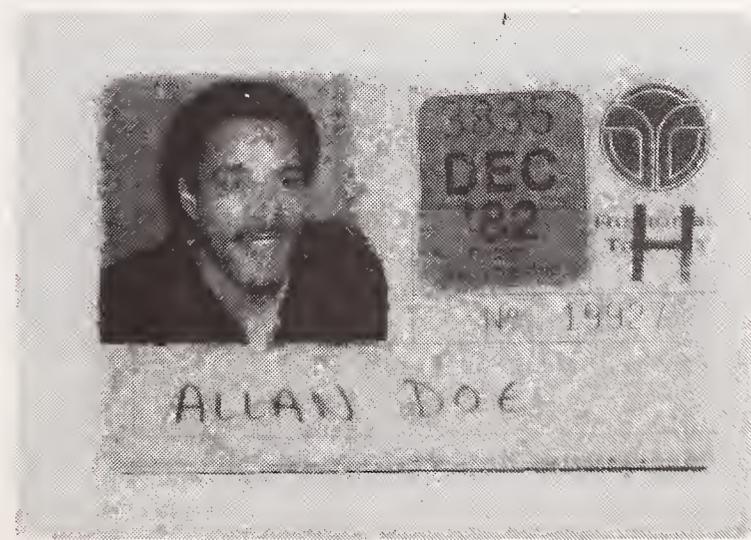


Senior/Handicapped Stamp
\$12

Zone Stamp
\$15

Student Stamp
\$20

FIGURE 2-2 . MONTHLY PASSES AND STAMPS



Note: Type of pass is indicated by background color of photo and the letter in the right hand corner. Student pass has a red background; senior pass is yellow, handicapped pass is blue.

FIGURE 2-3 . PHOTO ID CARDS



30¢ 10 @ \$3.00/book

60¢ 10 @ \$6.00/book

75¢ 12 @ \$9.00/book

FIGURE 2-4 . TICKETS SOLD BY RT

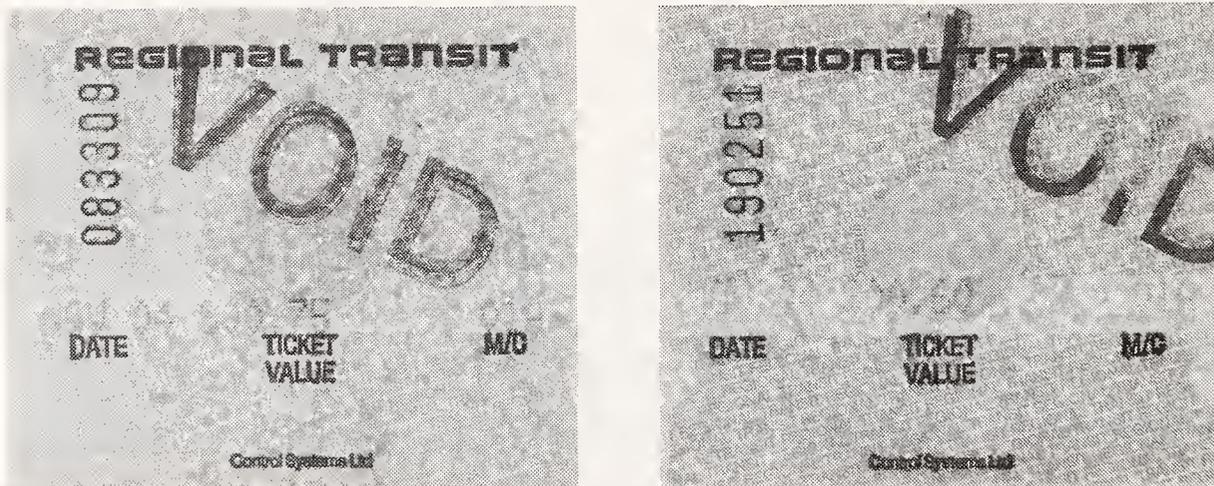


FIGURE 2-5 . VENDING MACHINE TICKETS

boarding the first bus; the daily pass is good for an unlimited number of boardings the day it is purchased. Cash, tickets, or a combination of both can be used to pay for the daily pass.

RT has raised its fares twice since the demonstration began (Table 2-5). On July 1, 1981, a 10 cent peak charge was instituted and the zone surcharge was doubled, but the basic cash fare remained unchanged. The price of a monthly pass was increased by half to \$24, equivalent to 40 one-way peak-period rides. Prices of elderly and handicapped stamps and zone stamps were also raised. The price of the daily pass was set at two one-way peak-hour trips plus five cents. A new student stamp was offered for \$12. The price of an elderly and handicapped stamp doubled to \$8.

TABLE 2-5
FARE STRUCTURE CHANGES DURING THE DEMONSTRATION

	<u>September 1, 1979</u>	<u>July 1, 1981</u>	<u>July 1, 1983</u>
Single Fare			
--Regular	\$.50	.50	.60
--Elderly & Handicapped	.20	.25	.30
Peak surcharge ^a	N.A.	.10	.15
Zone surcharge ^b	.25	.50	.75
Monthly Pass/Stamp			
--Regular	16.00	24.00	30.00
--Elderly & Handicapped Stamp	4.00	8.00 ^c	12.00
--Student Stamp	N.A.	12.00 ^d	20.00
--Zone Stamp	4.00	10.00	15.00
Daily Pass	1.00	1.25	1.50

^aNot charged on daily pass, regular monthly pass, or student pass. Elderly and handicapped can buy a student pass to avoid paying the peak surcharge.

^bMust be paid in addition to daily pass or regular single fare. Not required of elderly and handicapped riders.

^cIncreased to \$10.00 effective July 1, 1982.

^dIncreased to \$16.00 effective July 1, 1982.

Sales of regular monthly passes decreased nearly 60 per cent between FY 1981 and FY 1982; when the effect of County Welfare ending its pass program is taken into account, the decrease was about 45 per cent.¹ Some regular monthly pass users were students who switched to a student pass, although the magnitude of this effect is not known. The total number of monthly passes and stamps decreased by nearly 20 per cent from FY 1981 to FY 1982 (Table 2-6).² Between FY 1981 and 1984, the number decreased by 45 per cent.

TABLE 2-6
MONTHLY PASS/STAMP SALES,
FY 1981-1984

	Number of Items Sold				
	1981		1982	1983	1984 ^a
	Total	Excl. Welfare ^b			
Monthly passes	126,743	92,269	51,592	39,119	30,087
E&H stamp ^c	51,388	51,305	36,911	26,104	21,801
Student stamp	d	d	57,461	49,358	44,406
Zone stamp	---	---	3,234	2,548	1,280
TOTAL	178,131	143,574	149 98	117,129	97,154

^aEstimates based on July-December 1984 sales.

^bExcluding purchases by County Welfare.

^cFigures for FY 1981 include zone stamps (about 10% of the total).

^dNot offered FY 1981.

¹Effective July 1, 1981, County Welfare ended an eighteen-month program of purchasing monthly passes for its clients because of the fare increase.

²When the effect of County Welfare is removed, there was a net increase of about 4 per cent. This increase is due to implementation of the student pass and school outlet program.

On July 1, 1982, the price of an elderly and handicapped stamp was raised to \$10, and the price of a student stamp was raised to \$16. Two months later, RT allowed elderly and handicapped persons to buy a student stamp to avoid having to pay a peak surcharge. Sales of passes and all stamps declined through FY 1982, with an overall decrease of about 20 per cent in the number of items sold.

Fares were again raised on July 1, 1983. Cash fares increased to 60 cents, the peak surcharge to 15 cents, and the zone surcharge to 75 cents. The monthly pass continued to be priced at 40 one-way peak-hour rides. The number of passes and stamps sold in FY 1984 is projected to be 17 per cent lower than in FY 1983.

The composition of farebox revenue has changed over the demonstration (Table 2-7). Cash and tickets have accounted for an increasing proportion of farebox revenue, while that from monthly passes and stamps has declined.

TABLE 2-7
FAREBOX REVENUE BY SOURCE, FY 1981-1984^a

	<u>FY 1981</u>		<u>FY 1982</u>		<u>FY 1983</u>		<u>FY 1984^c</u>	
	<u>Total</u> \$000	<u>Excl. Welfare^b</u> \$000	<u>\$000</u>	<u>(%)</u>	<u>\$000</u>	<u>(%)</u>	<u>\$000</u>	<u>(%)</u>
Cash ^d	3,376	3,376	4,167	(62)	3,891	(61)	4,461	(63)
Monthly pass/stamp	2,222	1,670	2,241	(33)	2,007	(32)	2,076	(29)
Ticket/token ^e	213	307	307	(5)	423	(7)	529	(8)
TOTAL	\$5,811	\$5,259	\$6,715	(100)	\$6,321	(100)	\$7,066	(100)

^aExcluding special transit fares.

^bExcluding purchases by County Welfare.

^cEstimates based on July-December 1983 revenues.

^dIncludes cash paid for daily passes.

^eIncludes tickets or tokens used to pay for daily passes.

2.3 EXOGENOUS EVENTS

Several events have occurred during this demonstration which are outside the scope of the demonstration and could have significantly affected the results; some have been described above. These are summarized here, and are referred to again in appropriate sections of later chapters. Where possible, we have tried to estimate their effects on the demonstration results.

2.3.1 Fare Changes

Sales of TFP items through all distribution methods were probably lower than they would have been had the fare increases not taken place. There has probably been some overall decline in patronage, which has limited the market for TFP items in two ways. First, it is likely that some TFP users stopped riding the bus. Second, the loss of other passengers who did not use TFP has limited the extent to which the new distribution methods could attract new TFP users.

The TFP market has also been limited by the significant increase in the price of a monthly pass relative to the cash fare. Monthly passes were priced at 32 one-way rides; they are now priced at 40 peak one-way rides. The pass is therefore economical only for those who ride the bus every weekday or who have to transfer when they use the bus. Because cost is the most significant factor in the decision to purchase a pass, pass sales have declined. RT fare prepayment staff have noticed this effect: pass sales are significantly lower in months with fewer working days, such as February and November.

To the extent that there are economies of scale in the TFP distribution methods, and that the fare changes have reduced the size of the TFP market, the fare changes have caused the measures of productivity and cost effectiveness of all TFP distribution methods to be lower than they otherwise would have been. But these effects are probably small. Hence, they should not affect the conclusions about the comparative cost effectiveness of the distribution methods.

2.3.2 Fare Prepayment Department Organizational Changes

As described in Section 3.2 in the next chapter, the RT Fare Prepayment Department was reorganized in July 1983. The assistant manager position was

eliminated. The supervisor therefore has less time to spend on promotional activities because of increased reporting and supervisory responsibilities.³

The reorganizations have not significantly affected the measured operating costs of the distribution methods because RT staff only record the time actually spent on each method. There may have been a slight decrease in operating costs if clerical staff now spend more time on management duties that were formerly the responsibility of the assistant manager. But there is no evidence of this.

2.3.3 Decline in RT Patronage

Like many transit operators in the past several years, RT has experienced decreasing patronage. A number of things have contributed to this, including the transfers of routes in Yolo County and along the Folsom Corridor to private operators, the economic recession of 1982-83 and the decline in the real cost of gasoline. Between FY 1981 and 1984, RT patronage decreased by 30 per cent.

The drop in patronage has contributed to the decline in monthly pass sales, but is not the sole cause. Between FY 1981 and 1984, RT patronage declined 30 per cent; during the same period, the number of monthly passes sold declined by 45 per cent. Hence, the decline in patronage by itself has probably had a smaller effect on the demonstration results than that of the decline in TFP sales.

³Another reorganization in July 1984 eliminated one of the clerk positions. Three persons now work on fare prepayment: a supervisor, a secretary, and a clerk.

3. PLANNING AND IMPLEMENTATION

Five new TFP distribution methods were implemented in addition to an existing network of sales outlets; an additional aspect of the demonstration was to replace tokens by tickets that could be sent through the mail. This chapter documents the important events in the project. An overview of the main events is given in Section 3.1. The organization of the RT Fare Prepayment Department, which planned, implemented, and operates the TFP distribution methods, is discussed in Section 3.2. The network of TFP sales outlets that existed at the beginning of the demonstration is described in Section 3.3. Sections 3.4 through 3.8 cover the new methods: how they work, their planning, and their implementation. The conversion from tokens to tickets is described in Section 3.9. The purpose of this chapter is to describe the mechanics of each of the new methods, the work that is necessary to set them up, problems that can arise, and resources and opportunities that can be taken advantage of.

3.1 SCHEDULE OF EVENTS

The demonstration was carried out in three phases which extend for a period of four years from the date the grant was awarded. Pre-implementation planning and design lasted fifteen months through August 1981. Implementation of the new methods was completed within 11 months, except for implementation of the vending machines. Because of the long lead times for selection of a contractor, design, and production, the vending machines were not received until eighteen months after the other new distribution methods were in place. The final, or post-implementation phase, ended in September 1984.

A chronology of the main events in the demonstration and evaluation is given in Table 3-1. Detailed chronologies of the events for each of the new distribution methods are presented in the appropriate sections of this chapter.

TABLE 3-1
CHRONOLOGY OF MAJOR EVENTS IN THE DEMONSTRATION

Grant application	May 1980
RT prepayment staff assistant hired	August
Grant awarded	September
RFP for advertising services approved by UMTA and RT board	February 4, 1981
Deadline for submitting advertising proposals	February 26
Advertising agency selected	March
Expense, sales, and revenue data collection initiated	April 1
Ticket program implemented	May-July
Two clerks hired	October-November
Pre-implementation survey	October
Begin processing mail orders	October
Begin processing telephone orders	January 1982
Vending machine contract awarded	April
Contract signed by vending machine operator	June
Begin processing PAFT pre-notes	July
ATP implemented	July
Post-implementation surveys	May-June 1983
Vending machines received by RT	November 1983
Vending machines installed	December 1983- January 1984

3.2 FARE PREPAYMENT DEPARTMENT ORGANIZATION

Fare prepayment at RT was administered by the Fare Prepayment Department, which was under Finance Planning and Administration for most of the demonstration period. Before this demonstration began, the Fare Prepayment Department consisted of the Fare Prepayment Manager and a half-time clerk. An Assistant Fare Prepayment Manager and two additional clerks were hired during the demonstration, and the half-time clerk became a full-time secretary. A summary of the department staff and their duties is presented in Table 3-2.

TABLE 3-2

RT FARE PREPAYMENT DEPARTMENT - STAFF POSITIONS

Fare Prepayment Manager

- opening and closing outlets
- promoting new outlets
- setting up and designing new TFP distribution options
- reporting (grant evaluation reports, progress report, UMTA financial report, quarterly department reports)
- staff supervision

Assistant Fare Prepayment Manager^a

- reporting (monthly sales and revenue reports, hours and costs reports, detailed pass/stamp reports, ticket reports)
- staff supervision

Secretary

Clerks (2)^b

- order processing and recognition
- distribution
- record keeping (outlets; individual mail-order, telephone order, ATP, and PAFT customers)

^aThis position has been eliminated. These duties are now carried out by the manager.

^bA clerk position was eliminated effective July 1, 1984.

Effective July 1, 1983, the Fare Prepayment Department was put under the Controller Department. The Fare Prepayment Manager was designated the Fare Prepayment Supervisor and the Assistant Fare Prepayment Manager position was eliminated. The reorganization has not affected the day-to-day distribution of monthly passes and tickets. It has, however, made the Fare Prepayment Supervisor responsible for duties that were carried out by two persons before the reorganization. The main effect has been to sharply reduce the amount of time available for outreach work to promote new outlets. Outreach work at RT is now at a standstill until other

arrangements can be made. Currently, the Fare Prepayment Department is seeking the help of the Marketing Department, which has a community outreach person, to handle the outreach work.

3.3 DESCRIPTION OF PRE-EXISTING TFP OPTIONS

At the start of this demonstration, RT distributed TFP instruments through a network of over-the-counter and employer outlets. The employer outlets were established as part of the previous SMD-funded demonstration.¹ A program of school outlets was begun after RT introduced the monthly student stamp in July 1981. This section describes the background to this demonstration and the workings of the pre-existing TFP distribution methods.

3.3.1 Background

In October 1977, RT began a 33-month fare prepayment demonstration under a grant from the Office of Service and Methods Demonstrations of UMTA. The principal objective of the demonstration was to establish a successful employer-promoted pass program. During the last 12 months of the demonstration, the scope was enlarged to include all public and private pass outlets. As part of the demonstration, various marketing tools were tested to promote the convenience of purchasing a pass at the place of employment instead of at public outlets.

When the first employer began selling passes for May 1978, passes were available to the general public at 35 locations, providing excellent coverage of the RT service area. Two of these outlets were operated by RT: a downtown kiosk, which sold nearly half of all passes sold, and the main office reception area. The only major private pass outlet, i.e., one which sells only to employees or clients, was the Sacramento Regional Area Planning Commission (SRAPC)², which distributed free passes to those

¹For details of that demonstration, see Daetz and Holoszyc, Sacramento Transit Fare Prepayment.

²Sacramento Area Council of Governments (SACOG) as of February 1981.

employees who pledged to use the bus for commuting. By June 1981, RT had expanded its number of outlets to a total of 121: 51 employer, 45 public, and 25 private.

Since then, however, the outlet program has been reduced due to outlets either dropping out of the program or being dropped by RT. Weinstock's Department Store, the largest private outlet, dropped out in July 1982 because they could not maintain the cost of operating as an outlet during the economic recession. In May 1982, the RT board adopted a policy of dropping any outlet with less than \$200 per month in sales.³

RT began a program of school outlets in July 1981, concurrent with the introduction of a new student monthly stamp. Each junior high/middle school and high school outlet is closed out in June and reopened in September.

RT now has a total of 95 outlets: 35 public, 20 private, 19 school, and 21 employer outlets. The three types of outlets are classified by RT into two methods of distributing TFP instruments: over-the-counter sales (public, private, and school outlets) and employee-based sales (employer outlets). These two methods are briefly described in the remaining portion of this section. Detailed procedures for order processing and distribution are given in Appendix A.

3.3.2 Over-the-Counter Outlets

Over-the-counter (OTC) TFP distribution consists of TFP instrument sales via the public and private outlets. All public outlets accept cash and checks. Credit cards are accepted at the two RT outlets only. Nine of the 20 private outlets subsidize all of the pass price themselves. Of the remaining 11 private outlets, one subsidizes a portion; San Francisco Federal Savings and Loan bases its subsidy level on the amount of money in a TFP buyer's account. All private outlets which do not subsidize 100% of the price, accept only cash or checks.

RT prepares most outlet monthly orders based on previous sales and seasonal fluctuations. The preparation of each order consists of counting the number of ordered passes and stamps, packaging them, preparing an invoice, and sending the orders. Only a few private outlets determine their own orders based on their current

³As determined by quarterly sales audits.

client list. Initially, RT defined each outlet's potential sales on its proximity to transit, size of employer, and whether or not the outlet was in a high-activity center. RT would seasonally adjust each outlet's sales up during the spring and fall and down during the months of summer and winter. For the college outlets, the number of instruments issued would follow student enrollment fluctuations. At this time, all orders must be placed no later than the 10th day of the month preceding the ridership month. Examples of monthly order forms are presented in Figures 3-1 and 3-2.

All orders and invoices (Figure 3-3) are delivered to each outlet by an RT messenger between the 18th and 24th of the month preceding prepayment use. For example, passes which are to be issued for July and which were ordered by June 10th would be delivered by an RT messenger directly to the person(s) designated responsible for receiving the order by the 24th of June. Passes and stamps are sold or distributed between the 25th and the 10th of the new month; the sales deadline was extended to the 10th of the month following requests from the elderly and handicapped community. Because disability and social security checks are not sent until the first week of each month, the old purchase deadline on the 5th made it difficult for these groups to obtain stamps. The return of unsold passes and stamps, payments, and the completed invoice is to be made to RT by the 12th of the new month.

3.3.3 Employer-Based Outlets

Fifty-one employers within the RT service area make passes and stamps available to their employees. Four employers subsidize from 50% to 100% of the cost, two offer payroll deduction, and the remaining 15 offer a mix of cash and check, check-only, or subscription purchase. For subscription service, the employee must sign up and pay for the pass or stamp prior to the employer placing its order with RT.

Order placement and delivery dates are the same as the OTC order placement and delivery dates. Orders for \$100 or less are sent by certified mail (return receipt requested). But passes and stamps are sold or distributed by the employer between the 25th and 10th for OTC outlets. The unsold passes, stamps, payments, and invoices are due to RT by the 10th of the new month.

FARE PREPAYMENT
Order Form

Company Name or Organization _____

Order for the month of: _____

Total # of \$30 monthly passes	
Total # of \$12 E/H Stamps	
Total # of \$15 Zone Stamps	
Total # of \$20 Student Stamps	

Please mail this form no later than the 10th day of each month to the Pass Program Office.

Signature of Administrator

6/10/83

Date: _____

FIGURE 3-1. OUTLET MONTHLY PASS AND STAMP ORDER FORM

FARE PREPAYMENT
Order Form

Date: _____

Company or Organization Name:

<u>TICKET BOOK ORDER</u>	
Total # of \$9.00 Ticket Books (12 @ 75¢ ea)	
Total # of \$6.00 Ticket Books (10 @ 60¢ ea)	
Total # of \$3.00 Ticket Books (10 @ 30¢ ea)	

Please mail this form.

Signature of Administrator

6/83

FIGURE 3-2. OUTLET TICKET ORDER FORM



Regional Transit

P.O. Box 688 • Sacramento, CA 95803
PHONE (916) 444-7591

Page _____ of _____

INVOICE NO.
18609

SOLD TO:

Widget Products
242 Sky Lane
Sacramento, CA 95614

SHIP TO:

IF DIFFERENT THAN SOLD TO

Widget Products
John Doe
Mary Jones
242 Sky Lane
Sacramento, CA 95614

CUST P.O. No.	ORDERED BY John Doe	TERMS	ORDER TAKEN BY 11d	ORDER DATE 2/20/84
---------------	------------------------	-------	-----------------------	-----------------------

DESCRIPTION	QUANTITY	UNIT PRICE	EXTENSION
Monthly passes for Mar. '84	10	\$30	300
Monthly S/H stamps for Mar. '84	10	12	120
Monthly Zone stamps for Mar. '84	10	15	150
Monthly Student stamps for Mar. '84	10	20	200
Monthly passes returned		(30)	
Monthly S/H stamps returned		(12)	
Monthly Zone stamps returned		(15)	
Monthly Student stamps returned		(20)	

DELIVERED BY	DELIVERY DATE	RECEIVED BY X	PASS PROGRAM	PLEASE PAY THIS AMOUNT \$ 770
--------------	---------------	------------------	--------------	-------------------------------

ORIGINAL

FIGURE 3-3. SAMPLE OUTLET INVOICE

3.4 DIRECT MAIL ORDER

3.4.1 Description

The first of the five new TFP distribution methods to be introduced during the demonstration was direct mail order. Direct mail order allows RT customers to purchase a monthly pass, stamp or ticket books from RT through the mail. The mail order forms through which a customer selects the number and type of TFP instrument desired are available in newspapers, buses, and at outlets. The customer merely fills out the form and mails it to RT. Payment can be by check, money order or credit card.

Following receipt of the mail order forms (Figure 3-4) and verification of all credit card purchases, RT mails back the item(s) requested and a new mail-order form. An order for monthly passes and stamps must be received by RT by the 20th of the month in order to ensure return receipt at the beginning of the next month. Ticket books can be purchased at any time since they have no expiration date.

<p>1. Fill in your name and address</p> <p>Name _____</p> <p>Address _____</p> <p>City _____ State _____ Zip _____</p> <p>2. Check the box that indicates the item(s) you wish to purchase</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> \$12.00 Elderly/handicapped monthly stamp Quantity _____</td> <td><input type="checkbox"/> \$30 Monthly pass Quantity _____</td> </tr> <tr> <td><input type="checkbox"/> \$20.00 Student monthly stamp Quantity _____</td> <td><input type="checkbox"/> \$15 Zone monthly stamp Quantity _____</td> </tr> <tr> <td><input type="checkbox"/> \$9 Ticket book (12 @ 75¢ ea.) Quantity _____</td> <td><input type="checkbox"/> \$6 Ticket book (10 @ 60¢ ea.) Quantity _____</td> </tr> <tr> <td></td> <td><input type="checkbox"/> \$3 Ticket book (10 @ 30¢) Quantity _____</td> </tr> </table> <p>3. For purchase of a monthly pass or stamp, check the month you want to order. PAYMENT MUST BE RECEIVED BY THE 20th OF THE MONTH BEFORE, IN ORDER TO INSURE RETURN RECEIPT BY THE BEGINNING OF THE MONTH.</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <th>JAN</th><th>FEB</th><th>MAR</th><th>APR</th><th>MAY</th><th>JUN</th><th>JUL</th><th>AUG</th><th>SEP</th><th>OCT</th><th>NOV</th><th>DEC</th> </tr> <tr> <td> </td><td> </td> </tr> </table>	<input type="checkbox"/> \$12.00 Elderly/handicapped monthly stamp Quantity _____	<input type="checkbox"/> \$30 Monthly pass Quantity _____	<input type="checkbox"/> \$20.00 Student monthly stamp Quantity _____	<input type="checkbox"/> \$15 Zone monthly stamp Quantity _____	<input type="checkbox"/> \$9 Ticket book (12 @ 75¢ ea.) Quantity _____	<input type="checkbox"/> \$6 Ticket book (10 @ 60¢ ea.) Quantity _____		<input type="checkbox"/> \$3 Ticket book (10 @ 30¢) Quantity _____	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC													<p>4. Pay by a personal check or purchase a money order payable to Regional Transit for the amount you've checked. <u>Address, Phone number, and driver's license number or major credit card number must be on check.</u></p> <p>5. Or, make payment with your Master Card or Visa by supplying the following information.</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Master Card Acct. number _____</td> <td><input type="checkbox"/> Visa Acct. number _____</td> </tr> <tr> <td>Expiration date _____</td> <td>Expiration date _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Signature _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Telephone _____</td> </tr> </table> <p style="text-align: center; font-size: small;">Between 8:30 a.m. - 4:30 p.m.</p>	<input type="checkbox"/> Master Card Acct. number _____	<input type="checkbox"/> Visa Acct. number _____	Expiration date _____	Expiration date _____	Signature _____		Telephone _____	
<input type="checkbox"/> \$12.00 Elderly/handicapped monthly stamp Quantity _____	<input type="checkbox"/> \$30 Monthly pass Quantity _____																																								
<input type="checkbox"/> \$20.00 Student monthly stamp Quantity _____	<input type="checkbox"/> \$15 Zone monthly stamp Quantity _____																																								
<input type="checkbox"/> \$9 Ticket book (12 @ 75¢ ea.) Quantity _____	<input type="checkbox"/> \$6 Ticket book (10 @ 60¢ ea.) Quantity _____																																								
	<input type="checkbox"/> \$3 Ticket book (10 @ 30¢) Quantity _____																																								
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																														
<input type="checkbox"/> Master Card Acct. number _____	<input type="checkbox"/> Visa Acct. number _____																																								
Expiration date _____	Expiration date _____																																								
Signature _____																																									
Telephone _____																																									

FIGURE 3-4. MAIL ORDER FORM

RT verifies all credit card purchases. To verify, RT calls Bank of America and gives the name, credit card number, and expiration data of each credit card purchaser. If the purchaser is verified, RT will then fill out a credit card slip, validate it, and deposit the purchase in the bank. To date, RT has not had any trouble due to invalid credit cards.

Mail orders for monthly passes and stamps that are received before the 15th of the month are held until the 15th and then processed; orders received after the 15th are processed as they are received. Records on individual purchasers are kept on 3 x 5 cards in a special file (Figure 3-5). Orders for tickets are processed immediately after they are received. A detailed description of mail order processing procedures is given in Appendix A.

Doe, Jane 2000 V St. Sacramento, CA 95624
1/16/84 CK \$12 (1) S/H #1354-Feb'84 2/13/84 CK \$12 (1) S/H #1776-Mar '84

FIGURE 3-5. CUSTOMER PURCHASE RECORD

3.4. Planning and Implementation

The main events in planning and implementation of mail order are given in Table 3-3. The majority of the planning work, including conducting the advertising campaign, took place over a six-month period.

TABLE 3-3
CHRONOLOGY OF EVENTS --DIRECT MAIL ORDER

Mail order mailer drafted	November 1980
Agreement signed with Bank of America for credit card verification	February 1981
Post office box obtained for mail order and outlet transactions	February
Advertising campaign for mail order planned	June-July
Sign-up cards at public outlets	August 1981
Advertising campaign for mail order	October 1-15
Begin receiving and processing mail order	October
Survey of mail order users	December

The advertising campaign began with the distribution of sign-up cards at the public outlets in August 1981. RT patrons were told about the service. They were given an order form and offered prepaid postcards, which they could fill out and turn in to receive more information about the service.

An extensive media campaign was conducted in the first two weeks of October. A total of 144 60-second radio spots were purchased by RT; 96 10-second mentions were also made by the four radio stations that carried the advertisements. The radio spots and mentions notified listeners of the mail-order program and provided a telephone number to call for more information. Newspaper ads were run on five days; the ads provided a coupon to request further information from RT.

Large outside signs on the curb side of the buses ("queen signs") and mini-posters inside the buses also carried news of the program. A telephone number was provided to all RT.

To handle the telephone requests for information, RT hired an answering service. The service received the name, address, and telephone number of the person, plus how he found out about mail-order service.

RT received a total of 1,453 requests for information by the end of October, representing an estimated 9% of TFP purchasers. How these persons heard of the mail-order program is shown in Table 3-4.

TABLE 3-4
HOW RT PATRONS HEARD ABOUT MAIL ORDER

TV news	0.1%
Queen signs	0.6%
Mini-posters	1.2%
Newspaper ads	11.4%
Radio	21.8%
Posters	55.5%
Unknown	9.4%
	100%

Source: Tabulations from coupons sent in by persons who inquired about mail order service.

Mail orders were received in the beginning of October; November passes were the first monthly passes to be sold through mail order. During October, orders were received for 212 monthly passes and stamps and 134 ticket books.

3.5 DIRECT TELEPHONE ORDER

3.5.1 Description

Direct telephone order, the second of the new TFP distribution methods, allows customers to order and purchase a monthly pass, stamp, or ticket book from RT over the telephone by using a major credit card.⁴ The customer calls RT and provides the credit card number, date of expiration, name, address, telephone number, and types and numbers of TFP instruments desired. This order is recorded the RT clerk on a special form (Figure 3-6).

⁴ Master Card or Visa only.

.. FILL IN THE NAME AND ADDRESS

DATE RECEIVED _____

CLERK'S INITIALS _____

NAME _____

ADDRESS _____

CITY _____

ZIP _____

2. CHECK THE BOX INDICATING ITEM(S) BEING PURCHASED

3. MONTH PASS OR STAMP ORDERED FOR: _____

\$12 E/H STAMP \$20 STUDENT STAMP

QTY _____ QTY _____

\$15 ZONE STAMP \$30 MONTHLY PASS

QTY _____ QTY _____

\$3-30¢ ticket book \$9-75¢ ticket book

QTY _____ QTY _____

\$6-60¢ ticket book

QTY _____

4. TELEPHONE NUMBER OF PURCHASER
BETWEEN 8:30 AM and 4:30 PM

5. TYPE OF CREDIT CARD, ACCOUNT NUMBER AND EXPIRATION DATE

MASTER CARD

VISA

ACCOUNT # _____

ACCOUNT # _____

EXPIRATION DATE _____

EXPIRATION DATE _____

FIGURE 3-6. TELEPHONE ORDER RECORDING FORM

Monthly pass and stamp orders must be received by the 20th of the month to guarantee delivery by the first of the next month. If the customer calls after the 20th, RT will warn him that delivery by the first of the month is not guaranteed. Orders received after the 15th of the month are sent out the same day. Ticket books can be purchased at any time, and are processed immediately. As with mail order purchases by credit card, credit cards are verified on all purchases by telephone order. Records on each individual are kept on 3x5 cards, or for mail order (Figure 3-5). A detailed list of procedures for telephone order processing is given in Appendix A.

3.5.2 Planning and Implementation

A chronology of events leading up to implementation of direct telephone order is shown in Table 3-5.

TABLE 3-5
CHRONOLOGY OF EVENTS--DIRECT TELEPHONE ORDER

Agreement signed with Bank of America for credit card verification ^a	February 1981
Rates and installation requirements obtained from telephone company	October
Planning of marketing campaign	October-December
Installation of telephone lines	December
Answering service hired to take requests for information after normal working hours	December
Marketing campaign	January 1982 (first 2 weeks)
Orders accepted	January

^aThis also applied to direct mail order. See Table 3-2.

The marketing campaign for telephone order was similar in design and scale to the mail order campaign: radio and television spots, newspaper inserts, signs on buses, and posters at outlets. The campaign was carried out the first two weeks in January 1982.

The response to the marketing campaign was smaller than RT had expected. Only 68 orders were received the first month, and orders have declined since then. RT believes that the small response was in part due to scheduling the marketing campaign too early in the month. By the time the campaign was over, there was still one week before the deadline for ordering monthly passes and stamps for the next month. Some potential customers may have thought that it was too early to order at the time, and then forgotten to order as the deadline neared. RT believes in retrospect that the campaign should have been conducted beginning one week later, so that it spanned the deadline for ordering monthly passes and stamps.

3.6 AUTOMATIC TELEPHONE PAYMENT

3.6.1 Description

Automatic telephone payment (ATP) allows customers to pay for TFP items through a bank or savings and loan bill paying service. To use ATP, the customer must supply his bank with RT's name, address, and telephone number, as well as any other information that may be required by the bank. To make a TFP purchase, the customer calls the bank and gives his identification number, merchant code number, the amount to be paid, and an RT account code that identifies the TFP items that are being purchased: i.e., regular monthly pass, student stamp, etc. This information, which is recorded on a computer by the bank, is then processed, and the bank then sends payment to RT. The payment is accompanied by a statement (Figure 3-7) that gives the name and address of each customer, the account codes for the items being purchased, and the amount paid. The bank also sends a monthly statement to each customer who uses the service.

Upon receipt of the payment and the statement, RT mails the items purchased. The account codes with RT determine what items are being purchased; the amount of

Allstate
savings

The Bill Call System™

ALLSTATE SAVINGS AND LOAN ASSOCIATION · A MEMBER OF THE SEARS FAMILY

REMITTANCE REPORT

DATE	PAGE
3-9-83	1

SACRAMENTO RTD
SENIOR/HANDICAPPED MON SP
PO BOX 638 ATTN B BEACH
SACRAMENTO CA 95803

We are remitting payment for the following list of customers.
Our check for the total amount of payments accompanies this remittance report.
You may direct questions to The Bill Call System™ Department at (213) 980-1506 or (800) 232-2031.

CUSTOMER NAME	ACCOUNT NUMBER	PAYMENT AMOUNT
John Doe 1000 Deer Lake Drive Sacramento, CA 95801	SENIOR PASS 1100	\$10.00
Mary Lane 2005 Crestwood Ave. Sacramento, CA 95822	SENIOR PASS 1101	10.00
Jack Fast 7355 Oak Blvd. Sacramento, CA 95832	SENIOR PASS 1102	10.00
	** CHECK No.185-236791 TOTAL	30.00

S-1573 (7/81) (OLD SLD-365)

FIGURE 3-7. ATP BANK STATEMENT

payment determines the number of items for each account code.⁵ Customers receive their orders after they are paid for instead of in advance, which is usually the case for ATP. Depending on the financial institution, a customer who orders a monthly pass or stamp through ATP must place his order by the 15th or 20th of the preceding month in order to be guaranteed delivery by the first of the month.

TFP purchases through ATP are handled by the bank in a different way from that used to process normal telephone bill paying. For other bill payments by telephone, the purchaser has established an account with the business being paid; the statement supplied by the bank to the business therefore need contain only the customer's name and the amount paid. The statement format had to be changed in order to supply RT with the necessary information to process an order; the customer's address and special RT account code had to be added to the normal statement information.

The procedures used by RT to process ATP orders are described in detail in Appendix A.

3.6.2 Planning and Implementation

A chronology of the main events in planning and implementation of ATP is presented in Table 3-6.

TABLE 3-6

CHRONOLOGY OF EVENTS--AUTOMATIC TELEPHONE PAYMENT

Grant awarded	September 1980
ATP bill paying financial institutions contacted	November
Initial meeting with Allstate Savings and Loan	December
First Interstate Bank contacted	December
Meetings with advertising agency to discuss marketing campaign	February 1982

⁵ RT developed seven account codes to identify the seven fare prepayment plans available.

TABLE 3-6 (CONT)
 CHRONOLOGY OF EVENTS -- AUTOMATIC TELEPHONE PAYMENT

Allstate agrees to participate in program	February
First Interstate agrees to participate in program	April
Begin planning marketing campaign ^a	April
ATP account codes assigned	May
Marketing campaign	June
Allstate drops out of sales outlet program	June
Begin receiving ATP transactions	August

^aConcurrent with planning for PAFT marketing campaign.

ATP was more difficult to implement than mail order and telephone order because RT had to secure the cooperation of financial institutions that: 1) offer ATP to their customers, 2) provide adequate coverage of the RT service area, and 3) were willing to participate in the program. RT experienced some problems with finding financial institutions that were willing to participate, partly because the use of ATP for TFP purchases requires changes to the bank's normal statement.⁶ Allstate Savings and Loan was the first financial institution to participate in the program, but there are only 1,700 Allstate depositors in the RT service area. RT therefore decided to wait to implement the program until more coverage of the RT service area could be provided. First Interstate Bank, with 23,700 depositors in the RT service area, agreed to participate several months later.

Both financial institutions agreed to use the same account codes for the fare prepayment items, thereby greatly simplifying the task for RT. But there were several problems with working with two separate institutions. First Interstate set an

⁶ See the discussion in the preceding section.

earlier cutoff date for placing an order to ensure delivery by the first of the month: the 15th, as opposed to the 20th for Allstate. First Interstate also wanted to keep their identity separate from Allstate. They did not want to participate in a joint advertising program; separate counter cards had to be developed for the two institutions, and separate radio spots had to be run.

The marketing campaign was carried out over a two-week period at the end of June 1982 at a cost of \$6,000.⁷ The campaign consisted of counter cards with brochures in pockets at Allstate and First Interstate, newspaper advertisements, and a number of 60-second radio spots. Allstate and First Interstate were also going to put brochures in their customers' monthly statements, but were unable to do so.

The first transaction statement was received from Allstate in August. RT later met with the customer service representative at First Interstate to try to initiate some interest in the program there; the first transaction from First Interstate was received several months later. Response to the program has increased slightly, but continues to be low.

The low response to ATP is perhaps all that can be expected considering its potential market and the response to mail order and telephone order. The number of depositors at the participating financial institutions accounts for less than 3 per cent of the population in the RT service area. Assuming that this also represents the percentage RT patrons are covered in the same proportion by institutions offering ATP, less than 3 per cent of the potential market for all of the new TFP distribution methods is covered by ATP. Based on current sales (see Chapter 4) the new TFP distribution methods account for about 3 per cent of total pass sales. ATP sales would be expected to be about 40 to 50 passes per year, or about what they have been. Hence, the market penetration of ATP appears to be no worse than that for mail order and telephone order.

⁷ The marketing campaigns for ATP and PAFT were originally planned to run concurrently. But RT later decided that to avoid confusing the public about the two methods, the campaigns would be conducted separately, with a one-week preparation between them.

3.7 PRE-AUTHORIZED FUNDS TRANSFER

3.7.1 Description

Pre-authorized funds transfer (PAFT) allows the customer to pay for TFP instruments by direct (electronic) transfer of funds from his bank to RT's bank. The customer can also keep his order as a standing order to be processed each month with no additional effort on his part.

A prospective customer must request a pre-authorized debit form (Figure 3-8) from RT, complete it, and return it to RT with a voided check. A cover letter explaining the program is sent to the customer with the form. The purpose of the form is to obtain the required information and to have the customer authorize the funds transfer via his signature.

The information supplied by the customer is entered onto a magnetic disk for monthly transmittal to Bank of America, RT's originating financial institution. The first month a customer's file goes through the system, it will be a pre-notification (pre-note) and have no dollar value. This process serves two purposes: 1) to notify the customer's bank, the receiving financial institution, that a debit to the account has been authorized; and 2) to verify that the information supplied by the customer is correct. If there are no corrections to the file, it will go through the system the second month with a dollar value and the debit transaction will take place. Every month thereafter, the file will be activated automatically until the authorization is cancelled by the customer or RT. The time from initial sign up to receiving the first order is therefore about two months.

RT submits the diskette to Bank of America on the 16th of each month. This allows RT to take advantage of Bank of America's warehouse rate (50% discount) for the transmittal fee, and allows time for verification of the debit transaction to be delivered to RT prior to mailing the order in time to be received by the first of the next month. Because processing takes place only once a month, ticket orders are processed the same way as pass and stamp orders.

Upon receiving the diskette, Bank of America verifies the accounts of its own customers and forwards a tape to the local automated clearing house, the San

Francisco Federal Reserve Bank. The clearing house verifies all remaining customer accounts and forwards a list of potential PAFT users to each of the remaining banks.

Within five days after delivering the diskette to Bank of America, RT gets a register on the diskette. The register shows which transactions can be processed. If there is a problem with a transaction, the register shows a rejection of the transaction.

The actual process of bill paying is handled in a similar way. When a dollar amount appears on the diskette, Bank of America credits RT for all of the accounts listed within two or three days; the credits include all accounts from all banks. If, however, a customer has withdrawn his account between the time of processing the pre-note and the PAFT transaction, Bank of America will send an advice of charge notice to RT notifying that it will not be credited for the amount shown on the advice of charge. All advices of charge should be received by RT within ten days after Bank of America receives the diskette.⁸ After the third day, RT can proceed with sending out the orders.

Meanwhile, Bank of America forwards a tape to the automated clearing house (ACH), which debits the customers of each receiving financial institution and credits Bank of America. A list of debited customers is sent to each receiving financial institution from the ACH so that it can debit its own customers.

PAFT has the advantage that the originating and receiving financial institutions and RT gain through faster payments, fewer collection difficulties, and cheaper transaction costs. The customer has the advantage that he does not have to order each month. But the system is also flexible enough to allow a customer to cancel his order for any month or set of months.

3.7.2 Planning and Implementation

A chronology of the main events in planning and implementation of PAFT is presented in Table 3-7.

⁸RT has not always received advices of charge in time. See Section 3.7.2.

TABLE 3-7
CHRONOLOGY OF EVENTS - PAFT

Grant awarded	September 1980
PAFT originating financial institution contacted	November
Draft of PAFT authorization form begun	November
Begin planning marketing campaign ^a	April 1982
Bank of America selected as originating financial institution	April
Agreement with Bank of America signed	May
PAFT debit form and computer program to process diskette completed	June
Marketing campaign	July
First run of PAFT diskette	August
Begin processing PAFT debits	August
Distribution of wallet cards advertising PAFT to secondary schools	September

^aConcurrent with planning for ATP marketing campaign.

Planning and implementation for PAFT was somewhat easier than for ATP because RT had to reach agreement with only one financial institution: the originating financial institution for the transactions. Bank of America was a natural choice for the originating financial institution because it is RT's bank.

The marketing campaign for PAFT ran for two weeks in early July 1982. The campaign consisted of 60-second radio spots, newspaper advertisements, and wallet cards. The wallet cards were distributed to RT customers through sale outlets and were later distributed at schools to students. The total cost of the campaign was \$4,000. As with the other TFP distribution methods, RT continues to promote PAFT on a limited basis. Beginning August 1983, mini posters advertising PAFT were placed on buses as space was available. The program is also advertised in RT's bus schedule book.

PAFT is available to a larger number of persons than ATP, which is probably a major reason why its patronage is higher than that of ATP. An ATP user must be a

customer of a financial institution that offers bill paying by telephone and that has agreed to participate in RT's ATP program. PAFT is open to anyone who is a customer of a financial institution that is a member of the ACH; hence, customers of most regular banks can use the service. The market for PAFT may, however, shrink if regular bank customers switch to other financial institutions that offer full-service banking but are not members of the ACH.⁹

RT has had some trouble receiving advices of charge on time. In several cases when an account had been closed or there were insufficient funds, RT was not notified for several months. Meanwhile, monthly passes had been sent to the customers. A considerable amount of the RT Fare Prepayment Supervisor's time was spent on attempts, not always successful, to recover the money.

3.8 VENDING MACHINES

3.8.1 Description

Vending machines allow walk-up customers to purchase strips of tickets with cash at any time. The machines at RT vend two types of tickets in strips for \$6 each: eight 75¢ (peak fare) tickets or ten 60¢ (base fare) tickets. The two amounts are printed on different colored stock. The customer simply selects the type of ticket desired, inserts the correct payment into the machine (exact change, \$1 or \$5 bills), and a strip of tickets is issued. As payment is inserted, the machine shows the amount left to pay. Each ticket is printed as it is issued with the date, amount, and number of the machine issuing the ticket. If the machine malfunctions, or the purchase is cancelled, or the customer cannot complete the purchase, the machine issues a refund coupon, which is then sent to RT for reimbursement.

The three vending machines are located at Glendale Federal Savings (same location as RT's passenger service center on the K Street Mall), Downtown Plaza

⁹ There is a growing movement among financial institutions such as savings and loans and credit unions to offer full-service banking. Such institutions are typically not members of the ACH.

shopping center, and the California Department of Water Resources (inside the building on the ground floor).

RT staff visit each machine twice a week to remove money and check that there is an adequate supply of stock. Each time a cashbox is opened, the machine issues 14 audit tickets that contain sales information for that cash box. Three counters inside the machine provide a secondary means of auditing; they show the number of tickets issued by each printer (corresponding to the two denominations of tickets issued), and the total value of the bills accepted by the machine. These are used to check against the amount of money in the vault. There is no system for reporting machine malfunctions; RT staff usually first know of a malfunction when a customer reports the problem.

3.8.2 Planning and Implementation

A chronology of events in the planning and implementation of the vending machines is presented in Table 3-8.

TABLE 3-8
CHRONOLOGY OF EVENTS--VENDING MACHINES

Grant awarded	September 1980
MITRE Corp. contacted on design of machines	September
Draft report on alternative vending machines prepared by MITRE Corp.	February 1981
Final report on alternative vending machine alternatives	April
Invitation to bidders prepared by RT staff for approval by RT board	June-July
Invitation to bidders approved by RT board and sent to UMTA for review	August
Invitation to bidders approved by UMTA for distribution	October
Addendum to invitation to bidders sent out	November

TABLE 3-8 (CONT)
 CHRONOLOGY OF EVENTS -- VENDING MACHINES

Two bids received and sent to MITRE Corp. for review	January 1982
MITRE Corp. completes initial review	February
Contract awarded to Control Systems, Ltd.	April
Contract sent to Control Systems	May
Contract received from Control Systems	June
Decision on ticket amounts and styles to be vended	July
Blueprint of machines sent by Control Systems to RT	August
Contract extended to allow for maintenance training	April 1983
Machine specifications on money vaults changed	April
Machine equipment tested at Control Systems by MITRE Corp.	May
Begin selecting sites for vending machines	July
Machines tested by MITRE	August
Development of marketing campaign	September-October
First vending machine delivered to RT	September
Final negotiations with site location administrators	September
RT staff trained on maintenance	October
Second and third machines delivered to RT	October
First machine installed	November
Marketing campaign	November
Second machine installed	November
Third machine installed	January 1983

There were no vending machines of the type needed on the market at the time the grant was awarded. MITRE Corporation, under contract to UMTA, developed specifications for the machines before they went out to bid.

The amount of money set aside in the grant for purchasing vending machines was \$80,000. It was originally expected that eight machines could be bought for this amount. It developed, however, that the machines would cost over \$20,000 each, so that only three machines could be purchased.

After the Invitation to Bidders was approved by UMTA, RT distributed it in October 1981. Copies were sent to 19 prospective bidders, and it was also advertised in Passenger Transport. The due date for bids was January 25, 1982.

Two bids were received, both from firms in England. After review by RT and MITRE and approval by the RT board, the contract was awarded in April to Control Systems, Ltd. of Uxbridge, England. The contract was executed in June 1982, with delivery scheduled for one year later.

The delivery date and time of the contract were later extended to allow for design changes and maintenance training of RT staff. One of the changes was to have the machines equipped with removable money vaults.

Delivery of the machines began in late September 1983 and was completed in October. After testing by RT, the first machine was installed near RT's downtown outlet in November. The second and third machines were installed in November and January.

The marketing campaign was carried out in November 1983 at a total cost of \$12,000. The campaign included queen signs and mini posters on buses, newspaper advertisements, radio spots, and posters at outlets.

There have been problems with the machines malfunctioning, primarily due to dollar bills jamming and not stacking correctly in the money vaults. RT and Control Systems have tried to correct the problem, but the problems are still occurring. The average time between failures for an individual machine is about six weeks. At the time of this writing, RT staff are uncertain whether the problem can be completely solved.

Sales through the machines have been low, partly because of the jamming problems.¹⁰ During the first three months of operations, average vending machine sales were below \$1,500 or the equivalent of 250 ticket strips, per month.

3.9 TICKETS

Before the demonstration began, RT sold full-fare tokens that could be used in lieu of cash to pay full fares. Tickets were introduced to allow single-fare TFP items to be sent through the mail, so that different types of fares could be paid by using single-fare TFP items. When the ticket program began, RT sold books of tickets in the following amounts: fifteen 20¢ tickets (\$3.00 total) and twelve 50¢ tickets (\$6.00 total). As the fares have changed, RT has changed the amounts of its tickets. The following amounts of tickets can now be purchased: ten 30¢ tickets (\$3.00 total), ten 60¢ tickets (\$6.00 total), and twelve 75¢ tickets (\$9.00 total). Passengers can also purchase strips of eight 75¢ tickets or ten 60¢ tickets from vending machines.

A chronology of events in planning and implementation of the ticket program is shown in Table 3-9.

TABLE 3-9
CHRONOLOGY OF EVENTS--TICKETS

Grant awarded	September 1980
RT board approves replacing tokens with tickets	December
Tickets and ticket book covers drafted	January 1981
Globe Ticket Company delivers completed ticket books	March
Notification to outlets on ticket program	June
Begin vending tickets	July

¹⁰The machine that was installed at California State University at Sacramento was moved to Downtown Plaza shopping center because of low sales at the initial location.

4. DEMAND

The discussion in this chapter focuses on user-related issues in the demonstration: patronage; user characteristics; and nonuser characteristics, awareness, and attitudes.

4.1 PATRONAGE

4.1.1 Orders

Order volumes through the new TFP distribution methods for the entire demonstration period are shown graphically in Figures 4-1 and 4-2. Mail orders and telephone orders appear to have followed similar patterns (Figure 4-1). The number of orders was at its highest shortly after each method was first implemented; since then, sales have declined. Seasonal effects also appear in the sales for each method: peaks occur during the spring and fall months, and there is a sharp drop in sales during the summer.

The number of orders through ATP has remained low, and during the latter months has varied between 3 and 4 orders per month (Figure 4-2).

The number of PAFT orders has followed an increasing trend since its implementation in July 1982 (Figure 4-2). Because this method is best suited to steady customers, it appears to show less seasonal fluctuation than any of the other new TFP distribution methods.

The patterns of orders shown in Figures 4-1 and 4-2 are probably due in part to the way in which RT marketed the new distribution methods. Implementation of each method was preceded by a marketing campaign. But in each case this was a one-shot effort with no follow-up campaign.¹ RT fare prepayment management believe that the decline in orders by mail and telephone are due to natural turnover: customers

¹RT continues to advertise each of its TFP distribution methods in its book of bus schedules.

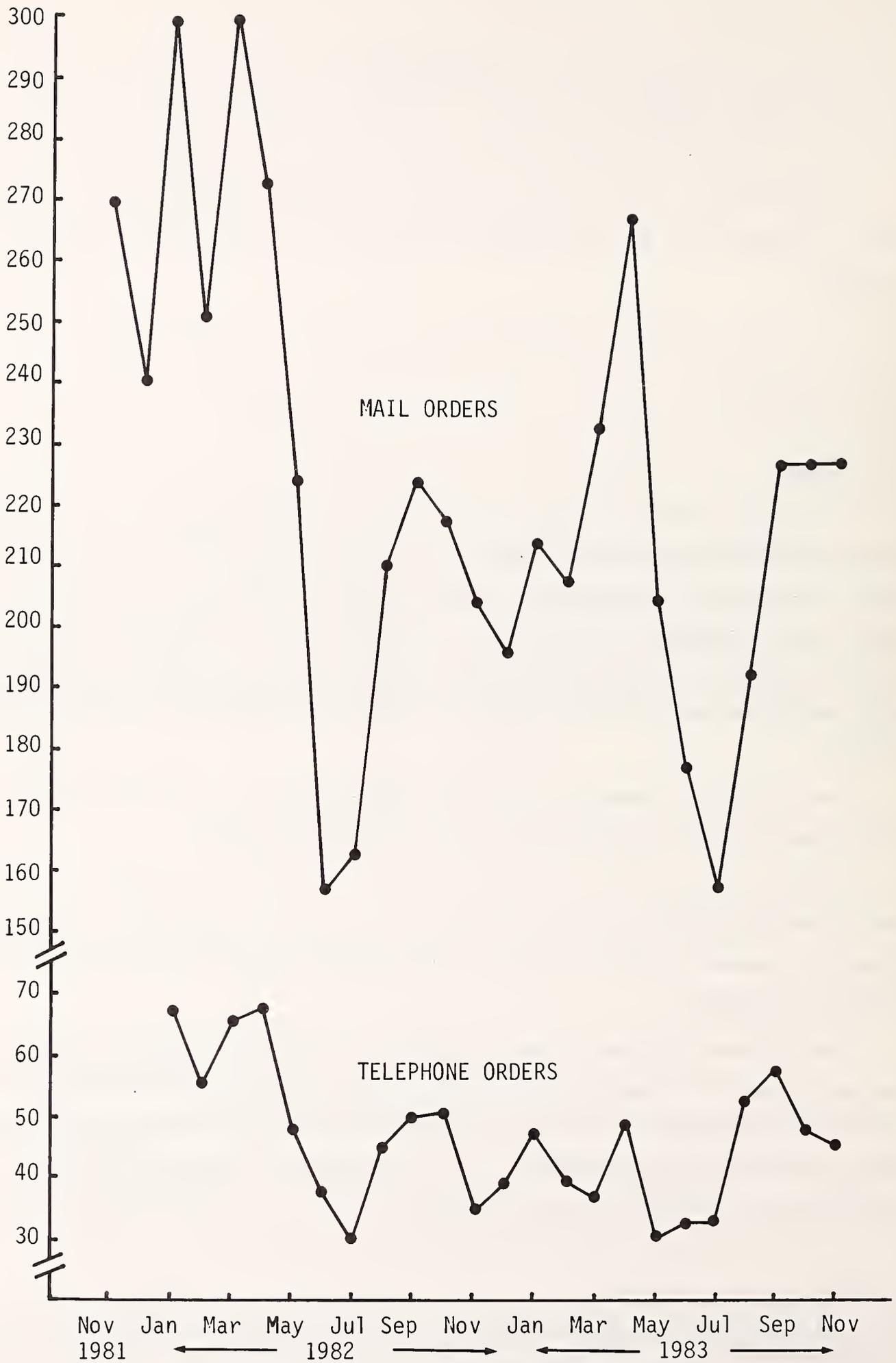


FIGURE 4-1. MAIL AND TELEPHONE ORDERS

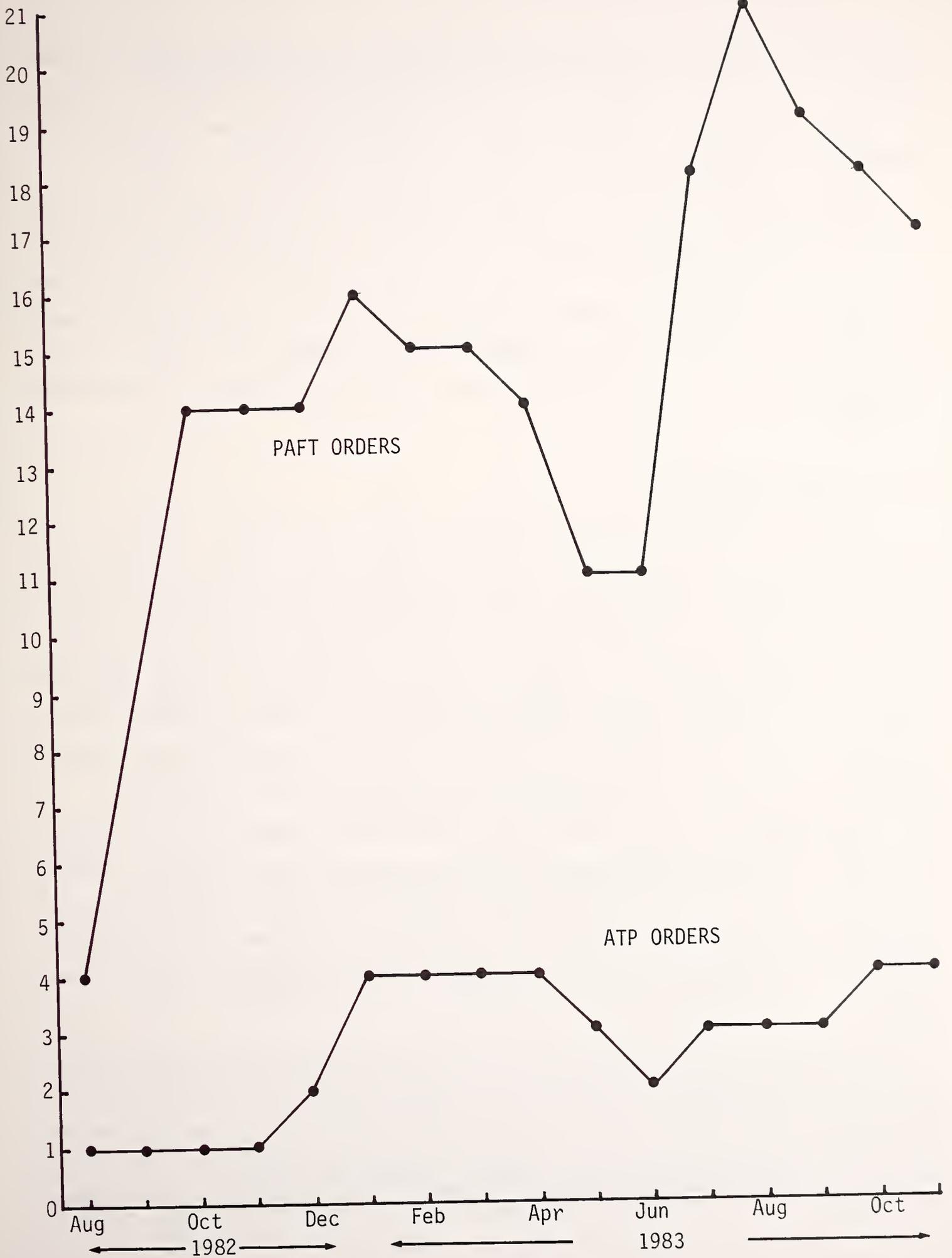


FIGURE 4-2. ATP AND PAFT ORDERS

change their method of purchasing TFP items, pay their fares differently, use a different travel mode, or move out of the RT service area. Without a continual marketing campaign, it is difficult for RT to attract new customers to make up for those who drop out.

Beginning August 1983, RT started to market mail order, telephone order, and PAFT by putting mini-posters on buses. This effort is continuing; the posters are put on the buses whenever space is available. RT has also issued a new brochure that describes the alternative methods to purchase TFP items. Sales through these methods appear to have increased since the new marketing effort was started, although it is too soon to determine whether this is primarily due to the additional advertising.

4.1.2 Sources of Revenue

Tables 4-1 and 4-2 show the monthly sales and revenues throughout the demonstration for each TFP distribution method. It appears that the introduction of each new distribution method has not had an appreciable effect on sales and revenues of the methods that were already in place. As discussed later in this chapter, users of the new methods have been drawn primarily from existing TFP purchasers who used outlets. But the volume of sales through the new methods is small compared to outlet sales. The effects of the new methods on outlet sales are therefore slight compared to other factors such as outlet closures and the general decline in RT patronage.

A comparison of annual revenues for all distribution methods (Table 4-3) shows that outlets have continued to account for the overwhelming majority (97% in 1983) of TFP sales. Mail order and telephone order sales constitute about 95% of the sales through the new distribution methods. As expected at the outset of the demonstration, ATP and PAFT sales are very low compared to mail order and telephone order sales.

The types of TFP items purchased indicate the markets served by each distribution method (Table 4-3). The relative revenues by type of TFP item for outlets and mail order are very similar. This is not unexpected because most persons who now use outlets could easily use mail order; the only exceptions are outlet users who pay cash and do not have a checking account or a credit card, employees who pay for their

TABLE 4-1
ITEMS SOLD BY DISTRIBUTION METHOD

MONTH	OUTLETS TICKETS	OUTLETS P/S	MAIL ORDER TICKETS	MAIL ORDER P/S	PHONE ORDER TICKETS	PHONE ORDER P/S	ATP TICKETS	ATP P/S	PAFT TICKETS	PAFT P/S	ALL METHODS TICKETS	ALL METHODS P/S	ALL ITEMS
APR81	0	16,076									0	16,076	16,076
MAY81	47	15,411									47	15,411	15,458
JUN81	1,181	14,382									1,181	14,382	15,563
JUL81	4,369	10,164									4,359	10,164	14,533
AUG81	2,743	8,963									2,743	8,963	11,706
SEP81	2,695	12,779									2,695	12,779	15,474
OCT81	2,664	14,662	5	174							2,669	14,836	17,505
NOV81	4,678	14,060	149	235							4,827	14,295	19,122
DEC81	3,217	12,739	110	239							3,327	12,978	16,305
JAN82	4,354	12,787	164	265	20	60					4,538	13,112	17,650
FEB82	3,557	13,058	128	244	38	45					3,723	13,347	17,070
MAR82	3,827	13,827	172	275	63	51					4,062	14,153	18,215
APR82	3,602	12,577	128	264	42	59					3,772	12,900	16,672
MAY82	7,348	12,634	136	209	49	34					7,533	12,877	20,410
JUN82	4,412	8,648	149	118	43	27					4,604	8,793	13,397
JUL82	7,168	6,978	144	134	29	23					7,341	7,135	14,476
AUG82	4,303	6,547	150	183	44	38		2	4		4,497	6,774	11,271
SEP82	6,395	9,352	108	219	45	40		2	9		6,548	9,622	16,170
OCT82	4,946	11,199	122	208	41	46		2	14		5,109	11,469	16,578
NOV82	4,979	11,024	113	191	41	28		3	14		5,133	11,260	16,393
DEC82	5,238	9,229	101	191	23	34		3	14		5,362	9,471	14,833
JAN83	5,805	10,171	132	200	42	44		4	16		5,979	10,435	16,414
FEB83	5,720	10,578	117	193	36	36		4	15		5,868	10,826	16,694
MAR83	5,503	10,896	126	217	31	30		4	15		5,658	11,162	16,820
APR83	5,671	10,347	191	241	35	46		4	14		5,897	10,652	16,549
MAY83	4,793	10,170	134	178	14	20		4	11		4,941	10,383	15,324
JUN83	9,472	6,753	114	149	51	18		2	11		9,637	6,933	16,570
JUL83	5,918	5,685	85	132	37	22		3	18		6,040	5,860	11,900
AUG83	4,644	5,448	159	170	50	37		3	21		4,853	5,679	10,532
SEP83	4,826	8,669	137	198	73	40		3	19		5,036	8,929	13,965
OCT83	5,036	9,292	142	190	55	35		4	18		5,233	9,539	14,772
NOV83	5,423	9,316	146	177	61	28		4	17		5,630	9,542	15,172

Note: Entries under "Tickets" are numbers of ticket books. Entries under "P/S" are number of monthly passes and stamps.

Source: RT Fare Prepayment Department monthly pass and ticket rates and revenue reports.

TABLE 4-2
REVENUE BY DISTRIBUTION METHOD

MONTH	OUTLETS	MAIL ORDER	TELEPHONE ORDER	ATP	PAFT	ALL METHODS
APR 1981	202,436					202,436
MAY 1981	195,063					195,063
JUN 1981	184,134					184,134
JUL 1981	192,645					192,645
AUG 1981	163,526					163,526
SEP 1981	209,601					209,601
OCT 1981	237,363	1,056				238,419
NOV 1981	237,007	4,412				241,419
DEC 1981	207,159	4,224				211,383
JAN 1982	211,680	4,894	1,203			217,777
FEB 1982	211,512	4,253	978			216,743
MAR 1982	228,207	5,056	1,280			234,543
APR 1982	207,503	4,660	1,216			213,379
MAY 1982	227,656	4,037	870			232,563
JUN 1982	157,504	3,011	774			161,289
JUL 1982	161,329	3,213	666			165,208
AUG 1982	138,051	4,171	988	20	46	143,276
SEP 1982	213,422	4,394	1,010	20	124	218,970
OCT 1982	219,393	4,319	1,072	20	220	225,024
NOV 1982	217,714	4,001	760	34	226	222,735
DEC 1982	188,238	3,966	810	44	240	193,298
JAN 1983	206,727	4,260	1,118	54	266	212,425
FEB 1983	215,117	4,088	848	54	256	220,363
MAR 1983	220,719	4,559	737	54	250	226,319
APR 1983	210,595	5,337	1,136	54	237	217,359
MAY 1983	202,103	3,930	460	54	192	206,739
JUN 1983	172,285	4,077	796	24	238	177,420
JUL 1983	163,831	3,626	881	36	384	168,758
AUG 1983	155,701	5,149	1,308	36	436	162,630
SEP 1983	222,179	5,563	1,523	54	404	229,723
OCT 1983	235,898	5,303	1,270	66	374	242,911
NOV 1983	241,807	5,088	1,152	66	354	248,467

Source: RT Fare Prepayment Department monthly pass and ticket sales and revenue reports.

TABLE 4-3

REVENUES BY TFP TYPE AND DISTRIBUTION METHOD--1983

	Outlets	Revenue (%) ^a			
		Mail Order	Telephone Order	ATP	PAFT
Monthly Pass					
o Regular	881,796 (36)	24,660 (44)	5,040 (46)	234 (39)	2,010 (55)
o Senior/Handicapped	254,080 (10)	5,688 (10)	462 (4)	372 (61)	750 (21)
o Zone stamp	22,095 (1)	330 (1)	40 (e)	---	---
o Student	861,336 (34)	14,068 (25)	1,408 (13)	---	868 (24)
Subtotal-pass	1,974,307 (81)	44,746 (81)	6,950 (63)	606 (100)	3,628 (99)
Tickets					
o Peak fare ^b	362,850 (15)	8,499 (15)	3,702 (34)	---	27 (1)
o Base fare ^c	77,598 (3)	3,024 (4)	390 (4)	---	---
o Zone surcharge ^d	16,959 (1)	270 (e)	6 (e)	---	---
Subtotal-tickets	457,407 (19)	10,803 (19)	4,098 (37)	---	27 (1)
TOTAL	2,431,714 (100)	55,549 (100)	11,048 (100)	606 (100)	3,655 (100)
% of TFP revenues by this method	97%	2%	e	e	e
\$ of revenues from new TFP distribution methods ^f	---	78%	16%	1%	5%

^aFigures in parentheses denote % of sales through each distribution method.

^bIncludes 60 tickets sold through June and all 75 tickets.

^cIncludes 60 tickets sold after June and 50 tickets.

^dIncludes all 25 and 30 tickets.

^eLess than 1%.

^fMail order, telephone order, ATP and PAFT.

Source: RT Fare Prepayment Department--Monthly Sales and Revenue Report.

passes through payroll deduction, and customers whose passes are subsidized by their employers or private outlets.

Telephone order revenues show a higher proportion of regular monthly passes and peak fare tickets than mail order and outlets. Because a credit card is needed to use telephone order, users of this method are more likely to be employed, and therefore to use RT primarily for work travel.² Telephone order appears to be more popular than outlets with regular pass purchasers, and less popular with students and seniors.

ATP users are all pass purchasers. This method has been set up especially for pass purchases. Ticket users would probably find the required lead time for ordering too inconvenient.

PAFT users are almost entirely pass purchasers; RT has, however, received standing orders for tickets. As with ATP, PAFT is better suited to pass purchases rather than ticket purchases because it is designed for persons who purchase regularly. The significant proportion of revenues from student stamps indicates that PAFT is quite useful for students: they ride the bus every month of the school year, and can easily cancel their orders during the summer.

4.1.3 Sources of Customers

Most users of the new methods were already TFP users. Table 4-4 shows the short-run and long-run distributions of mail order customers and telephone order pass purchasers by former fare payment method early and late in the demonstration.³ The differences between the two distributions are probably because of the long-run declines in mail order and telephone order patronage, mostly because of discontinued use by long-time pass and ticket users, and because of some effects of general

²See the discussion in Section 4.2.1 on characteristics of users of the new TFP distribution methods.

³The numbers of telephone order ticket purchasers, PAFT customers, and ATP customers were too small to obtain statistically meaningful tabulations.

TABLE 4-4

FORMER METHOD OF FARE PAYMENT--MAIL ORDER AND TELEPHONE ORDER USERS
(POST-IMPLEMENTATION SURVEY)

Former Method of Fare Payment	TFP Distribution Method Used/TFP Item Bought					
	Mail Order		Tickets		Telephone Order ^d	
	1981 ^a (N=244)	1983 ^b (N=180)	1981 ^a (N=60)	1983 ^b (N=70)	1982 ^c (N=78)	1983 ^b (N=31)
Monthly pass	87.3%	56.8%	9.7%	32.7%	84.4%	65.5%
Tickets	0.3*	1.3	51.7	15.4	1.0	10.3
Daily pass	e	11.0	4.5	3.8	5.7	6.9
Cash	10.4	27.7	22.6	46.2	7.0	13.8
Did not ride RT before	3.0	3.2	11.6	1.9*	1.9%	2.4

*Not significantly different from zero at 95% confidence level.

^a1981 interim survey of mail order users.

^b1983 post-implementation survey.

^c1982 interim survey of telephone order users.

^dThe samples of telephone order ticket purchasers were too small to allow statistically meaningful tabulation.

^eNot included as a category in this survey.

turnover, in which the spread from former method to new method gets greater as time goes by. Hence, it is unlikely that these methods have attracted significant numbers of new TFP users in the long run.

Some mail order ticket buyers appear to have changed their fare payment method from cash as a result of the service. Although mail order is less convenient than telephone order, it is still more convenient for some regular riders to order tickets through the mail than to carry the exact cash fare.

The methods have attracted few if any new riders to RT. Considering the small percentage of mail order and telephone users among TFP users, and the low percentage of RT riders represented by them, the change in RT patronage that is represented is insignificant. This finding is similar to that of the previous demonstration where it was concluded that the employer-based pass program had little effect on transit patronage.⁴

Almost all mail order and telephone order users who were formerly TFP users purchased their TFP items through outlets (Table 4-5). The diversion of customers from outlets has not been uniform for all types of outlets. When the former TFP purchase method of mail order and telephone order users is compared to the percentage of items sold through outlets (Table 4-6), it can be seen that there is a greater diversion from public outlets than from employer and private outlets. This is not unexpected. It is usually more convenient to order and pay for TFP items through employer and private outlets than through public outlets; and some employer and private outlets subsidize part of the purchase price.

Some customers have switched between mail order and telephone order; these represent significant percentages of mail order and telephone order users, but the total number of persons is small. The percentage of mail order patrons diverted to telephone order was about two per cent, or higher than the percentage of outlet patrons diverted to telephone orders. It therefore appears that there is some competition between mail order and telephone order. Similar data on ATP and PAFT

⁴See Chapter 1, page 4.

TABLE 4-5
FORMER TFP PURCHASE METHOD--MAIL ORDER AND TELEPHONE USERS
WHO PREVIOUSLY PURCHASED PASSES OR TICKETS

Current TFP Distribution Method Used/TFP Item Bought

Former Method of Purchasing Monthly Pass or Ticket	Mail Order			Telephone Order		
	1981 ^a (N=244)	1983 ^b (N=180)	Tickets 1981 ^a (N=60)	1982 ^c (N=78)	1983 ^b (N=31)	1983 ^b (N=31)
Outlets						
o RT outlet	36.9%	31.1%	25.8%	16.9%	27.3%	27.3%
o Other public outlet	49.5	44.7	16.1	56.9	40.9	40.9
o Private outlet	0.5	5.8	---	4.6	4.5	4.5
o Employer	4.4	6.8	---	10.8	9.1	9.1
o School	4.9	9.7	---	1.5	4.5	4.5
o Other	3.9	---	58.1 ^e	1.5	---	---
Mail order	---	---	---	7.7	---	13.6
Telephone order	---	1.9	---	---	---	---

Note: Entries denote percentages of respondents who previously purchased monthly passes or tickets.

^a1981 interim survey of mail order users.

^bMay 1983 post-implementation survey.

^cFebruary 1982 interim survey of telephone order users.

^dThe samples of telephone order ticket buyers were too small to obtain statistically meaningful tabulation.

^eIncludes private outlets, employers, and schools.

Source: Post-implementation telephone survey.

TABLE 4-6
 PERCENTAGE OF OUTLET SALES BY TYPE OF OUTLET--1983

<u>Outlet Type</u>	<u>Monthly Passes</u>	<u>Ticket Books</u>
Employer	10%	7%
Private ^a	29	17
Public	61	76
Total	100%	100%

^aIncludes school outlets.

Source: RT Fare Prepayment Department -- Monthly Sales and Revenue Reports.

customers indicate that ATP and PAFT do not appear to compete with other distribution methods.⁵

4.1.4 Markets for the New TFP Distribution Methods

The markets for the new TFP distribution methods are limited by rider awareness of and attitudes toward TFP methods, and by the nature of the methods themselves.

The added convenience of the new methods would not cause many current cash users to use monthly passes or tickets. Of the riders surveyed in 1981 who paid by cash, fewer than 3 per cent said that convenience was the reason they did not buy monthly passes. Current users of private and employer outlets probably find it more convenient to continue to purchase their TFP items in the same way. Hence, current TFP users who patronize public outlets are probably the primary market for the new TFP distribution methods. These would represent about 60 per cent of the monthly pass buyers and 75 per cent of the ticket buyers.

The potential market for the new methods is limited by what is required to use some of them. Mail order requires that the patron have a checking account or a credit card to use it. A telephone order patron must have a credit card, further limiting the accessibility of the method. ATP users must be patrons of financial institutions that offer telephone bill paying and that participate in the RT program; as pointed out in Chapter 3, it is estimated that only about 3 per cent of RT riders patronize these institutions. PAFT requires that the user have a checking account at a financial institution that is a member of the local ACH; the method is also designed for those who purchase monthly passes regularly.

The effects of these limitations on the markets for the new TFP distribution methods cannot be very well estimated because it is not known what percentage of RT public outlet patrons are affected by them. A rough estimate is that the market size for the new distribution methods, except ATP, is about half of the current number of

⁵The sample from the post-implementation telephone survey contained only 9 PAFT users and 2 ATP users. All ATP and PAFT respondents who had previously used monthly passes purchased them through outlets.

outlet users; the market size for ATP is probably about 1 per cent of the number of outlet users.

4.2 USER CHARACTERISTICS AND ATTITUDES

4.2.1 Travel and Socioeconomic Characteristics

Some travel and socioeconomic characteristics of TFP users by method of purchase (outlet, mail order, and telephone order) are shown in Table 4-7. The three groups appear to show similar transit trip rates for work trips. Outlet users are less likely to be employed and more likely to be students than mail order and telephone users. The major differences are in automobile ownership and income: outlet users are more transit dependent and less affluent than mail order and telephone order users. Telephone order particularly seems geared to higher income users, probably because having a major credit card is a prerequisite for telephone order use.

The three methods therefore appear to deal with slightly different markets. In particular, mail order and telephone order are more attractive to persons who use the bus to commute to work and therefore buy passes or tickets regularly.

4.2.2 Attitudes Toward TFP Distribution Methods

Users of mail order and telephone order were asked their reasons for using these services. The results are tabulated in Table 4-8. Convenience was the overwhelming reason for use, followed by inability to travel to outlets. Some other reasons were also cited: e.g., ability to pay by credit card, and ability to pay by check. The responses, plus the results shown in Table 4-4, indicate that mail order and telephone order have enlarged the market for fare prepayment by making it available to more persons. But in view of the number of persons involved, this effect has been slight.

Users were also asked about desired changes to their method of purchase. The tabulations in Table 4-9 show that users were well-satisfied with their service. The change most often suggested -- being able to order for more than one month at a time -- is not feasible under current operating procedures for mail order and telephone order.

TABLE 4-7
CHARACTERISTICS OF TFP USERS

	TFP Distribution Method Used		
	<u>Outlets (N=360)</u>	<u>Mail Order (N=232)</u>	<u>Telephone Order (N=40)</u>
Length of time a regular rider on RT			
Less than 6 months	9.6%	5.3%	0.0%
6 months - 1 year	10.2	9.0	15.0
More than 1 year	80.2	85.7	85.0
Average number of days/week ride the bus	5.0	4.4	4.7
Average number of weekly work trips	8.1	7.8	8.4
Per cent of bus users who have to transfer for work trip ^a	40.9%	30.2%	18.9%
Average number of weekly nonwork trips	2.2	1.1	1.0
Number of vehicles in household			
None	28.8%	18.7%	12.8%
1	33.5	27.5	28.2
2	26.9	37.0	46.2
3+	10.8	16.9	12.8
Average household size	3.0	2.8	2.4

^aPer cent of those who use the bus to go to work.

TABLE 4-7 (CONT)
CHARACTERISTICS OF TFP USERS

	TFP Distribution Method Used		
	<u>Outlets (N=360)</u>	<u>Mail Order (N=232)</u>	<u>Telephone Order (N=40)</u>
Occupation			
o Employed full-time	45.2%	55.8%	60.0%
o Employed part-time	7.7	5.3	7.5
o Student	34.4	27.5	22.5
o Homemaker	0.6	0.4	0.0
o Retired	7.7	7.2	10.0
o Unemployed	1.9	0.4	0.0
o Other	2.5	3.4	0.0
Age			
o Under 18	16.7%	24.4%	25.0%
o 18-24	18.6	4.3	0.0
o 25-34	21.1	22.9	18.8
o 35-44	14.2	17.1	13.5
o 45-61	17.4	19.4	31.2
o 62 and over	12.0	12.0	12.5
Sex:			
Male	36.0%	46.0%	57.5%
Female	64.0	54.0	42.5
Household income			
o median (000)	\$16.5	\$23.9	\$29.6
o % \$10,000 or under	29.8%	13.1%	5.4%

Source: 1983 post-implementation telephone survey.

TABLE 4-8

REASONS FOR USE OF
MAIL ORDER AND TELEPHONE ORDER

	<u>Mail Order</u>		<u>Telephone Order</u>	
	1981 ^b (N=304)	1983 ^c (N=360)	1982 ^d (N=102)	1983 ^b (N=40)
Why use TFP distribution method ^a				
o Convenience	94.0%	95.6%	88.3%	90.0%
o Can't get to outlet	10.7	4.4	6.8	5.0
o Outlet hours	0.7	3.1	0.0	0.0
o Other	12.7	5.7	14.6	10.0

^aMultiple responses.

^b1981 interim mail order survey.

^c1983 post-implementation telephone survey.

^d1982 telephone order interim survey.

TABLE 4-9
 DESIRED CHANGES TO SERVICE --
 MAIL ORDER AND TELEPHONE ORDER USERS^a

<u>Desired Changes to Service</u>	<u>Mail Order (N=304)</u>	<u>Telephone Order (N=102)</u>
None ^b	85.6%	74.3%
Order for more than 1 month	5.9	5.7
Change deadline for ordering	2.5	4.3
Use postpaid return envelope	1.0	---
Discount prices	1.5	17.1
Other	2.5	---

^aMultiple responses.

^b"None" was a specific response category.

Source: Interim mail order and telephone surveys (1981 and 1982).

4.2.3 Effects of Eliminating TFP Distribution Methods

TFP purchasers who use outlets, mail order, and telephone order were asked about how they would pay their fares if their current method of purchase were eliminated. The results (Table 4-10) indicate some of the likely effects of implementing alternative combinations of TFP distribution methods. These results are only approximate because they are based on current awareness of alternative TFP distribution methods among TFP users.

Most monthly pass and ticket buyers who now use mail order and telephone order would continue to pay their fares the same way. Telephone order users seem especially committed to monthly passes, probably because a higher proportion of them are commuters on RT. Eliminating mail order and telephone order would have a negligible effect on RT patronage.

The most significant shift in fare paying and bus riding behavior would be caused by the elimination of outlets. Nearly half of the outlet users said that they would stop using fare prepayment if outlets were eliminated. Almost 4 per cent of outlet users would stop riding the bus altogether, resulting in a projected drop in RT patronage of about 1 to 2 per cent.

Those persons who said that they would continue to use fare prepayment were further asked about how they would buy their monthly passes or tickets (Table 4-11). There would be some switching between mail order and telephone order if either method were eliminated, but the predominant changeover would be to public outlets. Mail order and telephone order were indicated as the main alternatives of outlet users who would continue using TFP.

Actual results of eliminating various distribution methods could be significantly different than those indicated here, depending on the level of marketing that accompanied the elimination. For example, an intensive effort to market PAFT would increase the awareness of this method; in consequence, PAFT could attract significant numbers of current mail order and telephone order customers such as school pass purchasers. The survey results therefore give only a general indication of response to alternative TFP distribution programs based on current levels of awareness.

TABLE 4-10
 EXPECTED FARE PAYMENT METHOD OF CURRENT TFP USERS
 IF CURRENT TFP DISTRIBUTION METHOD
 NOT AVAILABLE

Expected Fare Payment Method	Current TFP Purchase Method/Fare Payment Method				
	<u>Outlets</u>		<u>Mail Order</u>		<u>Telephone Order</u>
	Monthly Pass (N=298)	Tickets (N=62)	Monthly Pass (N=180)	Tickets (N=70)	Monthly Pass (N=31)
Monthly passes	52.3%	12.0%	69.0%	3.8%	82.8%
Tickets	1.1	32.0	0.6*	50.0	6.9*
Daily pass	17.9	4.0*	10.3	1.9*	0.0
Cash	24.7	52.0	18.7	40.4	10.3
Would not ride RT	3.9	0.0	1.3*	3.8*	0.0

*Not significantly different from zero at 95% confidence level.

Note: Tabulations based on responses to the following question from the post-implementation telephone survey: "If (outlets, mail order, etc.) were not available, how would you pay your fare on RT?" Table entries are percentages of respondents in each TFP distribution method/fare payment method category.

The following samples were too small to obtain statistically meaningful results: telephone order (ticket buyers only), ATP, PAFT.

TABLE 4-11

EXPECTED DIVERSION OF CURRENT TFP USERS TO OTHER TFP
DISTRIBUTION METHODS IF CURRENT TFP DISTRIBUTION NOT AVAILABLE

Expected method of TFP purchase	Current TFP Purchase Method/Fare Payment Method			
	<u>Outlets</u>	<u>Mail Order</u>		<u>Telephone Order</u>
	Monthly Pass (N=159)	Monthly Pass (N=125)	Tickets (N=38)	Monthly Pass (N=28)
Outlet (Total)	---	90.4%	80.0%	73.0%
--RT Outlet	---	37.9	6.7	38.9
--Other public outlet	---	43.1	66.7	38.5
--Private outlet	---	1.7	3.3*	0.0
--Employer	---	1.7	3.3	3.8*
--School	---	6.0	7.0	3.8*
Mail Order	60.0%	---	---	---
Telephone Order	31.6	5.2	16.7	---
ATP	2.1	0.0	0.0	0.0
PAFT	6.3	0.9*	0.0	0.0
Other	0.0	3.5	3.3*	0.0

*Not significantly different from zero at 95% confidence level.

Note: Tabulations based on response to the following question from the post-implementation telephone survey: "How would you buy your monthly pass/stamp or tickets (if current TFP distribution method were not available)?" Table entries are percentages of respondents who said they would buy monthly passes/stamps if the TFP distribution they were now using were not available.

The following samples were too small to obtain statistically meaningful results: telephone order (ticket buyers only), ATP, and PAFT.

4.3 NONUSER CHARACTERISTICS, AWARENESS, AND ATTITUDES

Nonusers of the new TFP distribution methods -- mail order, telephone order, ATP, and PAFT -- fall into four groups: non-TFP users, TFP users who continue to purchase through outlets, former users of the new methods, and persons who inquired about the new methods but did not use them.

4.3.1 Characteristics and Attitudes of Non-TFP Users

The new TFP distributions have had little success in attracting new TFP users. The pre-implementation and post-implementation on-board surveys were administered to all fare payment types in order to measure characteristics of cash and daily pass users. Responses to this survey are summarized in Table 4-12.

Daily passes and monthly passes are much more attractive to persons who have to transfer because RT does not issue transfers. Monthly pass users and ticket users appear to be two distinctly different socioeconomic types; monthly pass users have lower availability of an alternative to transit and are much less affluent than ticket users. Tickets seem to be oriented primarily toward commuters.⁶ Daily passes are used mainly by low income persons and students.

RT riders are generally well aware of monthly passes and have become increasingly aware of tickets. As shown in Table 4-13, the overwhelming majority of non-pass users are aware of the monthly pass. Awareness of tickets has increased since the October 1981 survey, which was six months after tickets were introduced. The majority of cash users, who are probably a better market for tickets than daily pass users, are aware of tickets. These results indicate, however, that more informational marketing about tickets could be done.

⁶This conclusion is supported by the record of ticket sales, which show peak fare tickets as the main source of ticket revenue.

TABLE 4-12
RT PASSENGER CHARACTERISTICS BY METHOD OF FARE PAYMENT

	Method of Fare Payment			
	Monthly Pass (N=482)	Tickets (N=97)	Daily Pass (N=511)	Cash (N=471)
Transfer on way to work	39.3%	10.27%	55.9%	15.4%
Length of time a regular rider on RT				
o Less than 1 month	1.7%	3.2%	7.2%	5.7%
o 1-5 months	8.8	6.3	14.6	13.7
o 6-11 months	12.3	10.5	16.4	15.0
o 1-5 years	38.9	42.1	32.3	34.0
o Over 5 years	38.3	37.9	29.5	31.6
Occupation				
o Employed full time	41.0%	84.0%	26.0%	43.8%
o Employed part time	8.9	3.2	16.4	11.4
o Student	33.9	9.6	36.4	27.5
o Homemaker	1.9	0.0	8.0	3.0
o Retired	10.8	1.1	4.4	9.7
o Unemployed	3.5	2.1	8.8	4.7
Usually have a vehicle available for use	32.0%	76.8%	33.6%	53.4%
Sex				
o Male	36.9%	40.0%	43.4%	43.1%
o Female	63.1	60.0	56.6	56.9
Age				
o Under 18	19.6%	3.2%	11.4%	10.1%
o 18-24	17.9	10.5	36.3	25.3
o 25-34	15.7	36.8	31.6	22.7
o 35-44	14.0	23.2	9.5	12.6
o 45-61	18.5	23.2	7.7	18.5
o 62 and over	14.3	3.2	3.4	10.7
Income				
o Median (000)	\$13.4	\$25.4	\$10	\$16.5
o Per cent \$10,000	30.4%	12.8%	51.0%	30.1%
o Refused/Unknown	19.4%	15.1%	29.1%	21.7%

^aPer cent of those who use the bus to go to work.

Source: 1983 post-implementation on-board survey.

TABLE 4-13
 AWARENESS OF TFP METHODS BY RT RIDERS

<u>Awareness of:</u> ^a	Tickets		Daily Pass		Cash	
	1981 ^b (N=33)	1983 ^c (N=97)	1981 ^b (N=584)	1983 ^c (N=511)	1981 ^{a,b} (N=551)	1983 ^c (N=471)
Monthly pass	100.0%	d	89.2%	d	92.8%	d
Daily pass	100.0	d	--	--	93.8	d
Tickets	--	--	36.1	49.5	51.7	65.3

^aEntries show % of respondents who are aware of TFP method.

^bOctober 1981 pre-implementation on-board survey .

^cMay 1983 post-implementation on-board survey.

^dAwareness of monthly pass and daily pass not asked in 1983 survey .

TABLE 4-14
 REASONS FOR NOT USING TICKETS

<u>Reason</u> ^a	<u>Daily Pass Users (N=253)</u>	<u>Cash Users (N=308)</u>
Dislike paying fare in advance	37.0%	32.9%
Inconvenient to buy	76.1	73.3
Might lose them	14.5	16.8
Would have to buy differently priced tickets	15.9	7.5
Ran out	8.0	5.0
Other	42.0	64.6

^aMultiple responses. Percent of those who gave reasons .

Source: 1983 post-implementation on-board surveys

Cash users and daily pass users were also asked why they did not use tickets (Table 4-14). There are also large numbers of riders who simply do not like to pay their fares in advance, and who therefore would not be ticket users under any circumstance. The perception of inconvenience in buying is the most frequently mentioned barrier to increased ticket use. This suggests that ticket sales could increase in response to a concerted effort by RT to market tickets and make them easier to buy.

There is little in the new TFP distribution methods themselves to attract non-TFP users to using TFP to purchase monthly passes. Cost is the overwhelming determinant in the decision to buy a monthly pass.⁷ As discussed in Chapter 2, monthly pass sales fell dramatically when their price was increased from 32 to 40 one-way rides. Without a concerted effort by RT to promote passes by discounting them, pass sales will not increase significantly.

Most RT riders are not aware of the new TFP distribution methods. As shown in Table 4-15, TFP users are more aware of the new methods than daily pass and cash users. The low level of awareness indicated here, and the perception of inconvenience in buying tickets at outlets noted above, suggest that RT could effectively promote ticket purchases through the new TFP distribution methods by cash and daily pass users. The low awareness of ATP and PAFT is notable; this is perhaps due in part to the comparative novelty of these methods, hence to the lack of knowledge about how they work.

4.3.2 Awareness and Attitudes of TFP Users

TFP users were asked about their awareness of the new TFP distribution methods; results are given in Table 4-16. Not surprisingly, there is generally a low awareness of ATP and PAFT among outlet, mail order, and telephone order users. About half of the outlet users are not aware of mail order and telephone order.

⁷The most frequently cited reason among monthly pass users for buying a monthly pass was that it was economical; likewise, the majority of non-pass users (over 80%) said that they did not buy it because it was not economical to do so. Source: 1981 pre-implementation on-board survey of RT passengers.

TABLE 4-15
 AWARENESS OF NEW TFP DISTRIBUTION METHODS
 AMONG RT RIDERS

	Method of Fare Payment			
	Monthly Pass (N=482)	Tickets (N=97)	Daily Pass (N=511)	Cash (N=471)
Mail order	50.1%	46.2%	29.4%	30.4%
Telephone order	47.8	44.9	28.6	32.7
ATP	25.1	17.1	14.4	15.1
PAFT	23.2	20.2	15.0	15.0

Note: Entries denote % of respondents who said that they are aware of the TFP distribution method.

Source: 1983 post-implementation on-board survey.

Those who are aware of the new methods were asked what disadvantages they see in them in order to find out what barriers exist to their use (Table 4-17). A significant percentage saw no disadvantages to the new methods; lack of information was frequently cited as a disadvantage. These two results are further indications that informational marketing on the new methods might result in increased sales. There is a high percentage of mail order users who are satisfied with their service and do not want to change their method of purchase. Many outlet users are also satisfied with the convenience of their service and see other methods as less convenient. Other possible disadvantages of the new methods -- e.g., too complicated, risk of losing items in the mail -- do not seem to be significant barriers to their use.

4.3.3 Characteristics, Awareness, and Attitudes of Former Users

Former mail order and telephone order customers were interviewed to determine why they discontinued using the service. The results, given in Table 4-18, show that customers stopped using these services primarily for reasons unrelated to the services themselves. The service-related reason that was most frequently cited was convenience; late arrival of orders was not a significant problem (see Chapter 5). Riding the bus less often was the most frequently cited non-service-related reason for discontinuing use.⁸ About one-third of the former mail order users who still ride the bus appear have switched away from TFP. Like current mail order and telephone order users, former users are more mobile, more affluent, and more likely to be employed than the general RT riding population (compare with Table 4-7).

4.3.4 Persons Who Inquired About the New Methods

Each marketing campaign for a new distribution method referred persons to RT to inquire further about the service. Only the number of those who inquired about mail order was large enough to provide an adequate sample for surveying. During the

⁸The sample of former mail order and telephone order users is biased because it excludes persons who moved out of the RT service area and could therefore not be reached. This does not, however, affect the main conclusion that reasons for discontinuing use are primarily unrelated to characteristics of mail order and telephone order services.

TABLE 4-16
 AWARENESS OF NEW TFP DISTRIBUTION METHODS
 AMONG TFP USERS

	<u>Method of Purchase^a</u>		
	<u>Outlets (N=360)</u>	<u>Mail Order (N=232)</u>	<u>Telephone Order (N=40)</u>
Mail order	56.3%	--	87.5%
Telephone order	46.6	42.2%	--
ATP	18.9	10.4	17.9
PAFT	17.3	15.2	17.5

^aSample sizes of ATP and PAFT users were too small to allow statistically meaningful tabulations.

Note: Entries denote % of respondents who said they are aware of the TFP distribution method.

Source: 1983 post-implementation telephone survey.

TABLE 4-17

PERCEIVED DISADVANTAGES OF
NEW TFP DISTRIBUTION METHODS^a

<u>Perceived Disadvantages</u>	<u>Outlet Users</u> (N=203)	<u>Mail Order Users</u>	<u>Telephone Order Users</u> (N=35)
MAIL ORDER			
<u>None</u>	<u>29.7%</u>	---	<u>17.6%</u>
Less convenient	32.6	---	58.8
Too complicated	2.3	---	0.0
Not enough information	16.9	---	2.9
Too inflexible	7.0	---	20.6
Too long turnaround	7.0	---	8.8
Risk of losing items in mail	8.1	---	2.9
Rather not change	14.0	---	17.6
TELEPHONE ORDER			
	(N=168)	(N=98)	
<u>None</u>	<u>34.5%</u>	<u>36.4%</u>	---
Less convenient	29.6	21.6	---
Too complicated	2.1	3.4	---
Not enough information	23.2	8.0	---
Too inflexible	2.8	1.1	---
Too long turnaround	3.5	0.0	---
Risk of losing items in mail	6.3	0.0	---
Rather not change	5.6	43.2	---
ATP			
	(N=68)	(N=24) ^b	(N=7) ^b
<u>None</u>	<u>42.6%</u>	c	c
Less convenient	29.6	c	c
Too complicated	5.6	c	c
Not enough information	16.7	c	c
Too long turnaround	1.9*	c	c
Risk of losing items in mail	1.9*	c	c
Rather not change	7.4	c	c
PAFT			
	(N=62)	(N=35)	(N=7) ^b
<u>None</u>	<u>33.7%</u>	<u>28.9%</u>	---
Less convenient	26.3	31.4	---
Too complicated	5.3	11.4	---
Not enough information	17.5	11.4	---
Too inflexible	3.5	8.6	---
Too long turnaround	0.0	0.0	---
Risk of losing items in mail	3.5	2.9	---
Rather not change	19.3	34.3	---

*Not significantly different from zero at 95% confidence level.

^aMultiple responses. Percentages of respondents who were aware of the methods.

^bSample too small to obtain statistically meaningful tabulations.

TABLE 4-18
CHARACTERISTICS AND ATTITUDES OF FORMER MAIL ORDER
AND TELEPHONE ORDER USERS

	<u>Former Method of TFP Purchase</u>	
	<u>Mail Order (N=91)</u>	<u>Telephone Order (N=43)</u>
Types of TFP items ordered through service		
Monthly pass	74.7%	66.7%
Tickets	22.0	26.2
Pass and tickets	3.3	7.1
Still ride RT	78.9%	85.7%
Method of paying fare ^a		
Monthly pass	49.3%	62.9%
Tickets	15.5	28.6
Daily pass	9.9	---
Cash	25.4	8.6
Where buy TFP items ^b		
RT outlets	19.6%	12.5%
Other public outlet	65.2	46.8
Private outlet	--	3.1
Employer	2.2	15.6
School	--	-
Other	13.0	21.8
Service-related reasons for discontinuing use		
Yes	25.8%	33.3%
No	74.2	66.7
Service-related reasons for not using ^{c,d}		
Inconvenient	39.1%	40.0%
Orders arrived late	4.3*	6.7*
Other, unspecified	73.9	53.3
Other reasons (unrelated to service) for not using		
Yes	50.0%	50.0%
No	50.0	50.0
Other reasons ^{c,e}		
Riding less often	41.3%	47.6%
Changed work/school location	8.7	--
Stopped using monthly pass	10.9	14.3
Moved	13.0	--
Other, unspecified	52.2	66.7

TABLE 4-18 (CONT)

CHARACTERISTICS AND ATTITUDES OF FORMER MAIL ORDER
AND TELEPHONE ORDER USERS

	<u>Former Method of TFP Purchase</u>	
	<u>Mail Order (N=91)</u>	<u>Telephone Order (N=43)</u>
Average number of days/week ride the bus ^f	3.2	4.3
Average number of weekly work trips ^f	6.2	6.7
Per cent of bus users who transfer on work trip ^g	21.1%	25.8%
Average number of weekly nonwork trips	1.3	1.8
Number of vehicles in household		
None	12.2%	10.0%
1	26.7	22.5
2	30.0	37.5
3 or more	31.1	30.0
Average household size	3.1	2.9
Occupation		
Employed full time	44.0%	54.8%
Employed part time	8.8	14.3
Student	31.9	19.0
Homemaker	2.2	--
Retired	9.9	7.1
Unemployed	1.1	2.4
Other	2.2	2.4
Age		
Under 18	22.1%	21.6%
18-24	14.0	5.4
25-34	18.6	10.8
35-44	18.6	8.1
45-61	16.3	45.9
62 or over	10.5	8.1
Sex		
Male	40.4	71.4
Female	59.6	28.6

TABLE 4-18 (CONT)
 CHARACTERISTICS AND ATTITUDES OF FORMER MAIL ORDER
 AND TELEPHONE ORDER USERS

	<u>Former Method of TFP Purchase</u>	
	<u>Mail Order (N=91)</u>	<u>Telephone Order (N=43)</u>
Household income		
Median (000)	\$26.3	\$31.9
% under \$10,000	11.8%	2.7%
Refused, unknown	16.5%	11.9%

*Not significantly different from zero at 95% confidence level.

^aPer cent of those who still ride RT.

^bPer cent of those who use monthly pass or tickets .

^cMultiple responses .

^dPer cent of those who said they had service-related reasons for discontinuing use .

^ePer cent of those who had other reasons (unrelated to service) for discontinuing use .

^fIncludes only those who still ride RT .

^gPer cent of those who use the bus to go to work .

interim mail order survey, persons who inquired about mail order but did not use the service were contacted to find out their reasons for not using it. The results are given in Table 4-19.

A majority of those who inquired about the service (70%) were already TFP users. As with current mail order users, public outlets accounted for a majority of the respondents. Reasons for not using the service were not clearly specified; many simply said that they didn't want to use the service. Lack of information about mail order was not a significant deterrent to its use.

TABLE 4-19
 CHARACTERISTICS OF PERSONS WHO INQUIRED ABOUT
 MAIL ORDER SERVICE BUT DID NOT USE IT

How fare is paid

- Cash	20.4%
- Tickets	13.0
- Daily pass	5.3
- Monthly pass/stamp	57.1
- Do not now ride RT	<u>3.2</u>
Total	100.0%

How purchase TFP items now^a

- RT office	16.5%
- Employer	3.7
- School	12.0
- Other outlet	<u>67.8</u>
Total	100.0%

Why don't use mail-order service^b

- Forgot to order	9.0
- Not enough information	10.3
- Don't wish to use	30.6
- Other, unspecified	50.1

^aPer cent of those who now purchase TFP items (mostly pass/stamp or tickets).

^bPer cent of those responding.

5. LEVEL OF SERVICE

Level of service issues include cost of the methods to users, user effort, turn-around time, and reliability.

5.1 USER COST

Cost to the users of the new distribution methods has not been a significant issue. Mail order costs the price of a postage stamp, plus any fees for processing checks or credit card purchases. Telephone order may entail a credit card charge, which is usually a flat annual or monthly fee. ATP costs the user a small fee per transaction, plus, possibly, a flat fee per month.¹ There is no direct cost to the user for PAFT other than normal checking fees. Hence, the new distribution methods may cost some users at most an additional 50¢ per order, but this is less than 5% of the cost of any monthly pass.

5.2 USER EFFORT

As discussed above, convenience or reduced effort on the part of users is the main reason customers are attracted to the new distribution methods. A ranking of methods by user effort is shown in Table 5-1.

PAFT is by far the most convenient of the new methods for users who regularly buy passes and tickets; once the initial authorization is processed, the customer need do nothing more than maintain a sufficient bank balance to pay for his order. PAFT has an added convenience which was not anticipated at the beginning of this demonstration: a customer can easily cancel his order for one or several months, then have his order automatically resumed (e.g., a student who will not buy a pass during the summer months, or a person who is going on vacation during a month).

¹A typical cost for telephone bill-paying service is a fixed charge of \$1.25 per month plus 15¢ per transaction. Some financial institutions waive the fixed charge if there is a minimum balance.

TABLE 5-1
RANKING OF DISTRIBUTION OPTIONS
BY LEVEL OF CONSUMER EFFORT

<u>Distribution Method</u>	<u>Level of Effort</u>	<u>Effort Required</u>
Employer by Payroll Deduction	Least Effort  Most Effort	Initial Authorization
Pre-Authorized Funds Transfer		Initial Authorization
Employer by Check		Check at Work
Automatic Telephone Payment		Initial Authorization and Phone Call
Direct Telephone Payment		Phone Call and Credit Card No.
Direct Mail Order		Personal Check and Mail
Over-the-Counter		Walk to Outlet
Vending Machine ^a		Walk to Machine and Have Cash

^aIn the original management plan, vending machines were rated as requiring less effort to use than over-the-counter purchases. They have been rated as requiring the most effort because there are only three machines, and they are not conveniently located for most RT riders.

Source: Modification of Ecosometrics, Inc., Management Plan: Table 4-3.

Outlets and vending machines require the most consumer effort. Vending machines have the advantage that they operate during times when outlets do not, but there are only three vending machines. There are far more public outlets, and they do not require users to have exact change. Hence, they have been judged in this evaluation to be less convenient than outlets.²

5.3 TURNAROUND TIMES

Minimum processing times for the various distribution methods are shown in Table 5-2. The required lead times for ordering are most critical for pass buyers, who must order in time to receive their passes by the first of the month. RT warns mail order and telephone order pass buyers that their orders must be received by the 20th of the month in order to guarantee delivery of passes by the first of the month. Mail and telephone orders for monthly passes that are received before the 15th of the month are held until the 15th and processed then; ticket orders are processed immediately. Processing times for mail order and telephone order pass purchases could therefore be longer than indicated in Table 5-2. In practice, however, almost all orders for monthly passes are received after the 15th of the month, and are therefore processed immediately.

Actual times from order placement to order receipt for mail order and telephone order customers are similar to those predicted in the Management Plan. As shown in Table 5-3, nearly all mail order customers receive their orders within a week, and nearly all telephone order customers receive their orders within three days. The typical times are four days for mail order and two days for telephone order.

5.4 RELIABILITY

The reliability of a method is the assurance that an order will be received, or that a monthly pass will be received by the first of the month. A preliminary ranking

²The Management Plan had rated outlets as requiring more effort to use than vending machines.

TABLE 5-2
MINIMUM PROCESSING TIME OF CONSUMER ORDERS BY DISTRIBUTION METHOD

Distribution Method	Payment Method	PROCESSING TIME FROM					Total Time From Consumer Order to Bank Receipt	Total Time From Consumer Order to Pass Receipt	Total Time From Consumer Order to Bank Receipt
		Consumer Order to Order Recognition	Order Recognition to Transaction	Transaction to Pass Receipt	Order Recognition to Bank Deposit				
Over-the-Counter	Cash, check, money order	immediate	immediate	immediate	2-4 days check clearance	2-4 days check clearance	immediate	2-4 days	
	Payroll ^b Deduction	1-2 days mail delay	2-4 days check clearance	1-2 days delivery or mail	2-4 days check clearance	2-4 days check clearance	4-8 days	3-6 days	
Employer	Cash, check, money order	immediate	2-4 days check clearance	1-2 days delivery or mail	2-4 days check clearance	2-4 days check clearance	5-9 days	4-7 days	
	Check	1-2 days mail delay	1-2 days for RT to process	1-2 days mail delay	1-2 days check clearance	1-2 days check clearance	4-8 days ^a	3-6 days	
Direct Mail Order	Credit Card	1-2 days mail delay	minutes to validate card	1-2 days mail delay	1-3 days process forms	1-3 days process forms	2-4 days ^c	2-5 days	
	Credit Card	immediate	minutes to validate card	1-2 days mail delay	1-3 days process forms	1-3 days process forms	1-2 days ^c	1-3 days	
Automatic Telephone Order	Electronic Transfer	1-2 days for receipt	immediate	1-2 days mail delay	immediate	immediate	2-4 days	1 day	
Pre-Authorized Funds Transfer ^d	Electronic Transfer	1-2 days for receipt	immediate	1-2 days mail delay	immediate	immediate	2-4 days	1 day	
Vending Machine	Cash	immediate	immediate	immediate	immediate	1-3 days cash pick-up	immediate	1-3 days	

^aCheck clearance time required for all transactions except over-the-counter sales.

^bEstimated times only.

^cDepends on whether passes or tickets purchased.

^d1/2 months lead time for initial order. Two-week minimum lead time to cancel order for the next month.

TABLE 5-3
 LENGTH OF TIME TO RECEIVE ORDER -
 MAIL ORDER AND TELEPHONE ORDER USERS

	Mail Order (N=232)	Telephone Order (N=40)
Length of time to receive order (days)		
● Mean	4.9	2.7
● Median	4.1	1.9
● Mode	4.0	2.0
● 90th Percentile	6.9	3.0

Source: May 1983 post-implementation telephone survey.

of the reliability of distribution methods was made in the Management Plan, a modified ranking is shown in Table 5-4. Mail delivery is the major element of uncertainty for all methods except over-the-counter sales at public outlets, and vending machines; but in practice, RT experiences problems with mail delivery only once every three or four months. All methods except vending machines are therefore quite reliable. Vending machines have so far proved to be much more unreliable than the other distribution methods: about twice a month the bill stackers in the vaults jam in one of the three machines, making the machine useless until the jam is cleared.

Mail order and telephone order customers who purchase monthly passes almost always receive them by the first of the month. Users surveyed in the post-implementation survey indicated few problems with late orders (Table 5-5).

TABLE 5-4
RANKING OF DISTRIBUTION OPTIONS
BY DEGREE OF RELIABILITY

<u>Distribution Method</u>	<u>Degree of Reliability</u>	<u>Uncertain Element</u>	
Over-the-Counter	Most Reliable	No uncertainty	
Direct Telephone Order	↓	Mail Delivery	
Automatic Telephone Payment		Computer Transfer and Mail Delivery	
Pre-Authorized Funds Transfer		Computer Transfer and Mail Delivery	
Employer by Check		Mail Order and Courier or Mail Delivery	
Employer by Payroll Deduction		Mail Order and Courier or Mail Delivery	
Direct Mail Order		Mail Order and Mail Delivery	
Vending Machine		Least Reliable	Machine

Source: Ecosometrics, Inc., Management Plan: Table 4-5.

TABLE 5-5
RELIABILITY OF MAIL ORDER AND
TELEPHONE ORDER SERVICE FOR PASS PURCHASERS

	<u>Mail Order</u> (N=180)	<u>Telephone Order</u> (N=31)
Number of times pass arrived after 1st of month ^a		
o None	91.8%	85.7%
o 1	3.8	10.7
o 2	4.4	3.6
o More than 2	0.0	0.0

^aPass purchasers only

Source: May 1983 post-implementation telephone survey.

6. COSTS AND COST EFFECTIVENESS

The discussion in this chapter focuses on the transit operator's view of the demonstration: demonstration costs, costs of the new TFP distribution methods, and their productivity and cost effectiveness. A final section discusses alternative methods of improving productivity in the Fare Prepayment Department.

6.1 DEMONSTRATION COSTS

The demonstration expenditures through 1983 are summarized in Table 6-1. At the end of 1983, 81% of the demonstration budget had been spent. Most of the remainder is budgeted for the remaining payment on the vending machines. The ending date for the project is September 30, 1984.

6.2 COST, PRODUCTIVITY, AND COST EFFECTIVENESS

The discussion in this section is concerned with the startup costs and the ongoing operating costs, productivity, and cost effectiveness of the new TFP distribution methods. Outlet costs and productivities were analyzed to provide benchmarks against which the economics of the new methods can be compared.

6.2.1 Analysis Method

The Fare Prepayment Department kept detailed records of labor hours and costs, by type of cost, for each distribution method throughout the demonstration (see Appendix B). These records were used to estimate the costs for each method in two categories: startup and operating.

Startup cost components consisted of the following: labor up to the time the method was implemented, equipment expenditures, and marketing campaign expenditures. RT records separated operating labor hours from startup hours, so that there was no confusion between the two.

TABLE 6-1
DEMONSTRATION EXPENDITURES

<u>Category</u>	<u>Expenditures Through 1983</u>	<u>Estimated Additional Expenditures</u>	<u>Total</u>
Wages			
Management	107,966	10,072	118,038
Clerical	162,964	7,036	170,000
Employee Benefits			
Travel	13,933	1,502	15,435
Materials & Equipment ^a	8,370	80,000	88,370
Supplies	4,119	981	5,100
Consultant Services ^b	77,862	7,138	85,000
Subcontracts--data ^c	31,462	---	31,462
Direct government transit ^c	21,553	---	21,553
Bank charges	<u>1,600</u>	<u>5 00</u>	<u>2,100</u>
Total	446,886	107,229	554,115

^aVending machines

^bData collection and MITRE Corp. consulting

^cExpenditures on first phase

Labor hours were recorded for each activity. Only those hours actually spent on an activity were recorded. The reader should therefore be aware that the labor costs reported here do not total to the actual labor cost of the Fare Prepayment Department.¹ Labor costs were burdened at 66%; i.e., an additional 66% on top of direct wages. This is in accordance with current RT budgeting practice, and should fairly represent total burdened labor costs for a typical transit operator.

The startup costs reported here, especially the management labor costs, are lower than what other transit operators would have to spend to set up these distribution methods. The RT Fare Prepayment Manager spent a considerable amount of her

¹PAFT is a partial exception. See Section 6.2.4.

time preparing the grant application; much of this time was taken up by research on what was needed to set up the methods, which would have to be repeated by another transit operator. This time was not included in RT's reports because it was spent before the demonstration began. The learning experience from planning and implementing mail order undoubtedly contributed to setting up the other new distribution methods. A transit operator who did not implement the same set of distribution methods in the same order should therefore expect to spend more management time for starting up each method if it were to implement a different set of distribution methods.

Operating cost components are shown in Table 6-2. These are the main cost components that could be isolated for each TFP distribution method. Other costs either could not be isolated, did not apply directly to TFP distribution, or were insignificant. Telephone costs, for example, are charged to RT's general administrative budget and are not charged to individual departments; they are, however, negligible compared to other operating costs. Cost for office space is likewise not charged to individual departments, and therefore cannot be estimated. The allocation operating costs account for about sixty per cent of the total RT Fare Prepayment Department budget.²

It was not possible to isolate fixed and variable operating costs for the distribution methods.² There was a high degree of month-to-month variation in the number of labor hours and the operating cost per TFP item and per TFP order. Attempts to estimate linear regression equations of hours and costs as a function of the workload of each method produced insignificant results. Hence, average total costs are used in lieu of variable and marginal costs.

6.2.2 Startup Costs

The total startup hours for the new TFP distribution methods are shown in Table 6-3 and the costs in Table 6-4. Except for vending machines, the costs of the

²According to RT, fare prepayment staff time not spent on distribution is spent on general administration and promotional activities and on carrying out duties for other RT departments.

TABLE 6-2
OPERATING COST COMPONENTS OF TFP DISTRIBUTION METHODS

<u>Item</u>	<u>Cost</u>	<u>TFP Distribution Method</u>				
		<u>Outlet</u>	<u>Mail Order</u>	<u>Telephone Order</u>	<u>ATP</u>	<u>PAFT</u>
LABOR ^a		o	o	o	o	o
Management	\$20.75/hr.	o	o	o	o	o
Clerical ^b	\$12.36/hr.	o	x	x	x	x
POSTAGE	20 /order	d	o	o	o	o
CREDIT CARD DISCOUNT FEE	5% of amount	e	e	o	x	x
DISKETTE PROCESSING FEE	\$20 + \$0.20/item ^c	x	x	x	x	o

o = Operations cost component of TFP distribution method

x = Does not apply

^aBurden included.

^bWeighted average of clerical wages + burden. Outlet costs include costs of couriers.

^cEffective January 1, 1984, Bank of America changed its fees for PAFT as follows: \$100 monthly flat fee, plus \$20 diskette processing charge, plus \$0.08 per item.

^dSome orders delivered by registered mail with return receipt.

^eCredit card used for a few purchases.

TABLE 6-3
START-UP LABOR

	<u>Mail Order</u>	<u>Telephone Order</u>	<u>ATP</u>	<u>PAFT</u>	<u>Vending Machines</u>
Management hours	31.75	12.00	47.75	40.75	145.50
Clerical hours	<u>39.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>.50</u>
Total hours	70.75	12.00	47.75	40.75	146.00

Source: RT Fare Prepayment Department, monthly Hours and Costs Reports.

TABLE 6-4
START-UP COSTS

	<u>Mail Order</u>	<u>Telephone Order</u>	<u>ATP</u>	<u>PAFT</u>	<u>Vending Machines</u>
Management	\$ 736	\$ 363	\$ 1,086	\$ 900	\$ 7,307
Clerical	<u>356</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>
Total Labor Costs	1,092	363	1,086	900	7,313
Equipment	0	0	0	0	83,000
Marketing Campaign	<u>10,000</u>	<u>10,000</u>	<u>6,000</u>	<u>4,000</u>	<u>12,000</u>
Total Cost	\$11,092	\$10,363	\$7,086	\$4,900	\$102,313

Source: RT Fare Prepayment Department, monthly Hours and Costs Reports.

marketing campaigns dominated the startup costs. The startup costs for mail order, telephone order, ATP, and PAFT are results of specific decisions by RT on how much to spend on the marketing campaigns rather than of sizes of the programs. Vending machine acquisition costs are directly related to program size. But the costs include design and development costs charged by the manufacturer; if RT purchases additional vending machines, they can be acquired for a lower unit cost than the first three machines.

6.2.3 Operating Costs

Operating costs for all TFP distribution methods (except vending machines) are shown in Table 6-5. The introduction of each new method had a negligible effect on the costs of the other methods. This conclusion is confirmed by RT Fare Prepayment Department management and staff, who have seen no cross-effects between the methods. Operating procedures for each of the methods are independent of each other, and therefore no cross-effects should be expected, particularly at the low volume of sales through the new TFP distribution methods.

Operating summaries that show direct operating costs and items handled are presented in Tables 6-6 through 6-10. Relationships between sales volumes and operating costs are quite inconsistent, especially for the new TFP distribution methods. Some of these inconsistencies are explained by characteristics of the individual methods. For example, outlets entail additional costs in June and September, when school outlets are closed, then reopened. Quarterly audits of outlets add additional operating costs. Some operating costs of the new TFP distribution methods were due to cross-training, where a clerical person who specializes in a particular method trained other clerical staff in its operation.

The low sales volumes through ATP and PAFT make it difficult to estimate how typical these costs are. For example, PAFT incurred additional operating costs soon after it was implemented because of the time necessary to track down persons who had received TFP items but had closed their accounts or had insufficient funds. These costs were small compared to operating costs for mail order and telephone order, but were large compared to PAFT operating costs because of the low sales volumes.

TABLE 6-5
BURDENED OPERATING EXPENSES

MONTH	OUTLETS	MAIL ORDER	TELEPHONE ORDER	ATP	PAFT	ALL METHODS
APR1981	2,021.00					2,021.00
MAY1981	2,672.48					2,672.48
JUN1981	2,201.02					2,201.02
JUL1981	3,392.91					3,392.91
AUG1981	2,713.76					2,713.76
SEP1981	3,793.92					3,793.92
OCT1981	3,072.58					3,072.58
NOV1981	3,975.78	814.64				4,790.42
DEC1981	2,859.75	1,492.96				4,352.71
JAN1982	3,039.11	877.49	333.51			4,250.10
FEB1982	3,401.86	871.35	340.01			4,613.22
MAR1982	3,748.95	833.06	475.94			5,057.94
APR1982	3,393.03	929.49	524.57			4,847.09
MAY1982	3,871.17	759.67	413.69			5,044.53
JUN1982	4,821.18	860.39	336.90			6,018.47
JUL1982	3,666.31	1,216.08	493.45			5,375.84
AUG1982	2,504.88	647.57	385.78			3,648.86
SEP1982	2,923.38	515.60	220.34	23.85	86.78	3,806.71
OCT1982	4,742.60	704.20	280.19	0.51	133.40	5,829.58
NOV1982	3,689.88	548.84	333.13	65.53	102.08	4,719.91
DEC1982	4,894.13	551.03	209.59	11.13	82.51	5,774.75
JAN1983	3,800.25	675.06	320.48	24.84	108.88	4,876.23
FEB1983	5,969.23	372.56	268.30	6.04	55.59	6,695.76
MAR1983	5,673.88	789.95	165.79	11.88	79.63	6,697.38
APR1983	4,346.14	878.15	108.81	11.24	55.89	5,420.96
MAY1983	4,761.00	733.51	188.46	8.91	76.62	5,762.46
JUN1983	5,880.50	590.67	274.02	28.54	70.58	6,831.65
JUL1983	4,469.49	753.32	208.93	8.32	57.92	5,529.99
AUG1983	4,985.88	666.67	409.75	10.02	89.92	6,159.20
SEP1983	4,411.01	597.63	326.49	28.51	86.87	5,471.94
OCT1983	4,863.30	587.19	273.40	6.18	108.30	5,803.47
NOV1983	4,860.32	669.62	301.91	12.20	73.39	5,916.53
					72.48	

TABLE 6-6
OPERATING SUMMARY--OUTLETS

MONTH	DIRECT OPERATING EXPENSES	TOTAL OPERATING HOURS	TICKETS SOLD	PASSES & STAMPS SOLD	REVENUE	ORDERS
APR1981	1,295.51	58.75	0	16,076	202,436	120
MAY1981	1,713.13	147.00	47	15,411	195,063	119
JUN1981	1,410.91	115.50	1,181	14,382	184,134	118
JUL1981	2,174.94	179.75	4,369	10,164	192,645	120
AUG1981	1,739.59	155.25	2,743	8,963	163,526	122
SEP1981	2,432.00	224.00	2,695	12,779	209,601	141
OCT1981	1,969.60	206.50	2,664	14,662	237,363	143
NOV1981	2,548.58	269.25	4,678	14,060	237,007	139
DEC1981	1,833.17	170.50	3,217	12,739	207,159	133
JAN1982	1,948.15	184.25	4,354	12,787	211,680	128
FEB1982	2,180.68	223.25	3,557	13,058	211,512	133
MAR1982	2,403.17	244.75	3,827	13,827	228,207	126
APR1982	2,175.02	199.75	3,602	12,577	207,503	125
MAY1982	2,481.52	236.25	7,348	12,634	227,656	113
JUN1982	3,090.50	304.25	4,412	8,648	157,504	98
JUL1982	2,350.20	210.25	7,168	6,978	161,329	90
AUG1982	1,605.69	159.25	4,303	6,547	138,051	80
SEP1982	1,873.96	183.00	6,395	9,352	213,422	100
OCT1982	3,040.13	243.25	4,946	11,199	219,393	98
NOV1982	2,365.31	235.50	4,979	11,024	217,714	100
DEC1982	3,137.26	239.75	5,238	9,229	188,238	102
JAN1983	2,436.06	238.50	5,805	10,171	206,727	108
FEB1983	3,826.43	373.50	5,720	10,578	215,117	111
MAR1983	3,637.10	349.88	5,503	10,896	220,719	111
APR1983	2,785.99	296.88	5,671	10,347	210,595	110
MAY1983	3,051.92	288.76	4,793	10,170	202,103	105
JUN1983	3,769.55	365.66	9,472	6,753	172,285	102
JUL1983	2,865.06	267.52	5,918	5,685	163,831	80
AUG1983	3,196.08	301.92	4,644	5,448	155,701	77
SEP1983	2,827.57	333.40	4,826	8,669	222,179	93
OCT1983	3,117.50	359.82	5,036	9,292	235,898	98
NOV1983	3,115.59	289.69	5,423	9,316	241,807	96

TABLE 6-7
OPERATING SUMMARY--MAIL ORDER

MONTH	DIRECT OPERATING EXPENSES	TOTAL OPERATING HOURS	TICKETS SOLD	PASSES & STAMPS SOLD	REVENUE	ORDERS
APR 1981						
MAY 1981						
JUN 1981						
JUL 1981						
AUG 1981						
SEP 1981						
OCT 1981	380.14	65.25	5	174	1,056	
NOV 1981	547.08	57.50	149	235	4,412	269
DEC 1981	980.02	68.25	110	239	4,224	239
JAN 1982	589.27	75.00	164	265	4,894	295
FEB 1982	583.90	75.00	128	244	4,253	249
MAR 1982	562.91	74.25	172	275	5,056	296
APR 1982	620.27	81.50	128	264	4,660	270
MAY 1982	510.12	65.75	136	209	4,037	224
JUN 1982	567.65	77.50	149	118	3,011	155
JUL 1982	794.94	92.00	144	134	3,213	162
AUG 1982	435.14	60.25	150	183	4,171	211
SEP 1982	352.34	42.25	108	219	4,394	222
OCT 1982	474.15	56.25	122	208	4,319	217
NOV 1982	371.89	43.75	113	191	4,001	202
DEC 1982	372.07	41.25	101	191	3,966	192
JAN 1983	458.83	53.63	132	200	4,260	214
FEB 1983	259.28	47.13	117	193	4,088	205
MAR 1983	528.67	62.00	126	217	4,559	232
APR 1983	591.96	71.88	191	241	5,337	268
MAY 1983	492.74	56.00	134	178	3,930	204
JUN 1983	398.47	46.14	114	149	4,077	177
JUL 1983	499.16	56.76	85	132	3,626	156
AUG 1983	448.30	48.65	159	170	5,149	194
SEP 1983	407.54	44.18	137	198	5,563	225
OCT 1983	401.66	42.82	142	190	5,303	226
NOV 1983	453.85	47.55	146	177	5,088	227

TABLE 6-8
OPERATING SUMMARY -- TELEPHONE ORDER

MONTH	DIRECT OPERATING EXPENSES	TOTAL OPERATING HOURS	TICKETS SOLD	PASSES & STAMPS SOLD	REVENUE	ORDERS
APR 1981						
MAY 1981						
JUN 1981						
JUL 1981						
AUG 1981						
SEP 1981						
OCT 1981						
NOV 1981						
DEC 1981						
JAN 1982	240.26	21.25	20	60	1,203	68
FEB 1982	239.53	20.50	38	45	978	56
MAR 1982	332.80	35.75	63	51	1,280	66
APR 1982	362.97	42.00	42	59	1,216	68
MAY 1982	284.25	29.25	49	34	870	48
JUN 1982	232.58	24.50	43	27	774	38
JUL 1982	330.42	34.25	29	23	666	30
AUG 1982	268.33	33.75	44	38	988	46
SEP 1982	162.96	16.75	45	40	1,010	50
OCT 1982	202.51	19.00	41	46	1,072	51
NOV 1982	229.70	22.75	41	28	760	35
DEC 1982	151.69	13.25	23	34	810	39
JAN 1983	228.95	21.13	42	44	1,118	48
FEB 1983	190.08	18.38	31	36	848	40
MAR 1983	122.16	9.00	29	30	737	37
APR 1983	93.66	2.38	35	46	1,136	49
MAY 1983	131.29	11.25	14	20	460	31
JUN 1983	192.31	17.64	51	18	796	33
JUL 1983	152.11	11.25	37	22	881	33
AUG 1983	289.94	26.27	50	37	1,308	53
SEP 1983	240.79	18.04	73	40	1,523	58
OCT 1983	201.50	15.94	55	35	1,270	48
NOV 1983	217.51	17.79	61	28	1,152	46

TABLE 6-9
OPERATING SUMMARY --ATP

MONTH	DIRECT OPERATING EXPENSES	TOTAL OPERATING HOURS	TICKETS SOLD	PASSES & STAMPS SOLD	REVENUE	ORDERS
APR1981						
MAY1981						
JUN1981						
JUL1981						
AUG1981						
SEP1981						
OCT1981						
NOV1981						
DEC1981						
JAN1982						
FEB1982						
MAR1982						
APR1982						
MAY1982						
JUN1982						
JUL1982	15.36		0	2	20	1
AUG1982	9.04	1.00	0	2	20	1
SEP1982	0.40	0.00	0	2	20	1
OCT1982	42.08	4.75	0	3	34	1
NOV1982	7.28	0.50	0	3	44	2
DEC1982	16.21	1.38	0	4	54	4
JAN1983	4.16	0.50	0	4	54	4
FEB1983	7.90	0.88	0	4	54	4
MAR1983	7.49	0.75	0	4	54	4
APR1983	5.93	0.63	0	4	54	3
MAY1983	18.44	1.50	0	2	24	2
JUN1983	5.55	0.63	0	3	36	3
JUL1983	6.64	0.50	0	3	36	3
AUG1983	18.49	1.89	0	3	54	3
SEP1983	4.25	0.26	0	4	66	4
OCT1983	8.11	0.76	0	4	66	4
NOV1983						

TABLE 6-10
OPERATING SUMMARY-PAFT

MONTH	DIRECT OPERATING EXPENSES	TOTAL OPERATING HOURS	TICKETS SOLD	PASSES & STAMPS SOLD	REVENUE	ORDERS
APR 1981						
MAY 1981						
JUN 1981						
JUL 1981						
AUG 1981						
SEP 1981						
OCT 1981						
NOV 1981						
DEC 1981						
JAN 1982						
FEB 1982						
MAR 1982						
APR 1982						
MAY 1982						
JUN 1982	44.10		0	4	46	4
JUL 1982	63.24		0	9	124	9
AUG 1982	93.66	6.25	0	14	220	14
SEP 1982	74.12	3.25	0	14	226	14
OCT 1982	61.58	3.50	0	14	240	14
NOV 1982	78.48	3.50	0	16	266	16
DEC 1982	44.54	2.50	0	15	256	15
JAN 1983	59.84	4.00	0	15	250	15
FEB 1983	44.62	2.50	0	14	237	14
MAR 1983	57.80	3.50	0	11	192	11
APR 1983	53.61	3.38	0	11	238	11
MAY 1983	45.49	2.63	0	18	384	18
JUN 1983	66.76	4.25	0	21	436	21
JUL 1983	65.13	4.71	0	19	404	19
AUG 1983	78.65	5.89	0	18	374	18
SEP 1983	56.16	3.50	0	17	354	17
OCT 1983	55.47	3.14	0			
NOV 1983						

6.2.4 Productivity

Average productivity measures for all TFP distribution methods are presented in Table 6-11. Outlets show a high cost per order, but the cost per item is lowest of any of the TFP distribution methods, which is to be expected because of the large number of items processed in a typical order. Outlet operating costs also include the costs of the couriers to take the orders to the outlets.

Mail order and telephone order processing entail considerable amounts of time per order in order placement and recognition, keeping proper records of purchases, order preparation, and addressing envelopes. Telephone order requires more time because the clerk has to record the purchase on a special form, instead of receiving a completed order form as with mail order. Credit card verification, which takes several minutes per order, must be done for all telephone orders; only a few mail orders are paid for by credit cards. Telephone orders also entail payment of a credit card fee, which further adds to the cost.

ATP involves less labor on RT's part. The statement for an order is received from the bank, and funds are transferred automatically. The clerk only needs to read the statement and prepare the order.

PAFT involves the least amount of labor of all the new TFP distribution methods. Most of the labor involved is in processing new orders as they come in (preparing to run the pre-notes) and taking the diskette to and from the bank each month. PAFT productivity statistics would be much better if orders were higher; the fixed operating costs -- the monthly bank charge, labor to take the diskette to and from the bank, and the bank fee for processing the diskette -- accounted for about half the total operating costs. Beginning January 1984, Bank of America increased its monthly fee significantly, and PAFT operating costs have more than doubled.

TABLE 6-11
1983 PRODUCTIVITY STATISTICS FOR
TFP DISTRIBUTION METHODS^a

	<u>Outlets</u>	<u>Mail Order</u>	<u>Telephone Order</u>	<u>ATP</u>	<u>PAFT</u>
Orders processed ^b	1,091	2,328	476	38	175
Hours/order	3.18	0.25	0.36	0.25	0.23
Cost/order	\$49.52	\$3.14	\$5.98	\$4.12	\$4.73
Revenue/order	\$2,059.54	\$21.90	\$23.59	\$14.53	\$19.38
Items sold ^c	160,136	3,528	834	38	175
Items/order	146.8	1.5	1.8	1.0	1.0
Hours/item	0.02	0.6	0.20	0.25	0.23
Cost/item	\$0.34	\$2.07	\$3.41	\$4.12	\$4.73
Revenue/item	\$14.03	\$14.45	\$13.46	\$14.53	\$19.38

^aJanuary - November 1983.

^b"Orders" for outlets are the number of outlet orders processed during January-November 1983. For example, a simple outlet that was active over the entire 11-month period would count as eleven orders.

^c"Items" refers to total passes, stamps and ticket books.

6.2.5 Cost Effectiveness

The measure of cost effectiveness used in this analysis was operating cost as a percentage of revenue. This is a measure that is used by RT to evaluate these methods, and it is also similar to the way in which many businesses judge the cost effectiveness of cost centers. The results for 1983 are presented in Table 6-12.

Outlets are, not surprisingly, the most cost-effective distribution method. There are probably economies of scale: it does not take much more time to process a large order than a small order. The average outlet order costs 10 to 15 times as much to process, but yields 100 to 150 times as much revenue, as an order through the new distribution methods. Hence, the high sales volume per outlet makes them particularly cost-effective.

It is worth noting here RT's policy of discontinuing outlets with less than \$200 in monthly sales. Given that the average cost per order for small outlets is about the same as for all outlets, it is at least as cost-effective to operate an outlet with \$200 in sales as any of the new TFP distribution methods.

Cost effectiveness of each of the new TFP distribution methods varied somewhat over the year, probably due to the variations in sales volumes and the presence of fixed costs. For example, the marked drop in the operating cost percentages between the third and fourth quarters for ATP and PAFT are due to increases in sales through these methods.

The cost effectiveness of PAFT would be considerably improved if order volumes were higher. As noted above, a high percentage of the operating costs for 1983 can be attributed to fixed costs. The proportion of fixed costs to total costs has increased even more because of the increase in the flat monthly charge by Bank of America. If PAFT order volumes were equivalent to those through mail order, PAFT would be at least as cost-effective as mail order. This result suggests that PAFT would be an attractive distribution method for a transit operator with significantly higher TFP sales volumes than RT, where a correspondingly higher number of PAFT sales would be expected.

TABLE 6-12
COST EFFECTIVENESS OF TFP DISTRIBUTION METHODS

Operating Cost as a Percentage of Revenue, 1983 ^a					
<u>TFP Distribution Method</u>	<u>1st. Qtr.</u>	<u>2nd. Qtr.</u>	<u>3rd. Qtr.</u>	<u>4th. Qtr.</u> ^b	<u>Average</u> ^c
Outlets					
o Passes/stamps	1.8	2.2	2.3	1.7	1.9
o Tickets	3.7	3.0	2.0	3.2	2.9
Mail order	14.2	16.5	14.1	12.1	14.4
Telephone order	27.9	23.9	25.5	23.8	25.4
ATP	26.4	36.9	37.2	13.9	28.2
PAFT	24.8	30.8	23.2	20.0	25.8
All methods	2.8	3.0	3.1	2.4	2.8

^aFigures show operating cost as a percentage of revenue received. Costs include burden on labor.

^bExcluding December.

^cJanuary - November 1983.

6.3 IMPROVING PRODUCTIVITY AND COST EFFECTIVENESS

The following discussion centers on methods in which the productivity and cost effectiveness of RT's TFP distribution system could be improved. The discussion is based on experiences that are for the most part specific to RT, and therefore cannot be assumed to apply to other transit properties.

6.3.1 Adjustment of the TFP Distribution Network

A goal of this demonstration was to develop a cost-effective TFP distribution network in which more efficient distribution methods are kept and others are dropped. But the sales volumes through the new methods have not been high enough to allow such "fine-tuning" to take place.

The analyses above are based on costs due to labor actually spent on the various TFP distribution methods. It is not that simple, however, to use these findings to achieve cost savings by dropping the less efficient methods. The workload of the Fare Prepayment Department is not constant over the month; it is highest at the end of the month and the beginning of the next month. But it is this peak workload that determines the number of staff needed in the department; the ability to adjust operating costs therefore depends critically on the ability to use part-time labor in the department. Furthermore, the small number of persons in the department means that it is impossible to hire the exact amount of labor for the workload; for example, if the workload became too much for the existing staff size, RT would have to hire another full-time clerk, but would then probably have too much capacity. Hence, any adjustment of the TFP distribution network must take into account the uneven workload and the "lumpiness" in the amount of order-processing capacity that can be provided.

RT is therefore left with several possible ways in which to improve the cost effectiveness of its TFP distribution network: 1) marketing the new TFP distribution methods more aggressively to increase sales; 2) dropping the least cost-effective of the new methods -- ATP, PAFT, and possibly, telephone order; 3) dropping all of the new distribution methods and selling passes and tickets only through outlets. The first may cause sales through the new methods to increase, but given past experience, most of the new users would be drawn from the current population of outlet patrons; hence, there would be few if any benefits to RT. The second would also yield few benefits to

RT; even if ATP, PAFT, and telephone order were all dropped, TFP distribution costs would be reduced by about five per cent; and labor costs would be reduced only to the extent that the labor thus freed could be used elsewhere at RT. Dropping all new methods would probably allow RT to decrease its fare prepayment staff size; and most patrons of the new distribution methods would probably continue to purchase passes and tickets at outlets.

6.3.2 Improvements to Current Department Operations

Current department procedures are, for the most part, carried out manually.³ Automation of some of these procedures could yield significant benefits to the department. This has been identified by the Fare Prepayment Manager as the single most cost-effective improvement to department operations that could be made.

The automation would give another significant benefit: reliability. Currently, in order to ensure reliability in its records, RT staff must make a backup record of each order, which takes additional time. There is a significant danger of records being lost due to misfiling. A computer would simplify record filing procedures and therefore improve the security of record keeping, in addition to saving the extra recording time.

³Sales and revenue reports, and accounts receivable are now done on RT's central computer.

7. SUMMARY AND CONCLUSIONS

This project was intended to test the use of new methods to distribute transit fare prepayment (TFP) items: monthly passes and tickets. These methods were implemented on top of an existing system of over-the-counter, school, and employer outlets for distributing monthly passes and tickets. The demonstration included a switchover from tokens to tickets so that single-ride fare prepayment items could be sent through the mail. Five new distribution methods were implemented over a three-year period:

1. Direct mail order. Users can order passes and tickets through the mail.
2. Direct telephone order. Users can call in their orders and pay with a credit card. Orders will then be mailed directly to the purchaser.
3. Automatic telephone payment (ATP). Pass and ticket purchasers can use existing automated telephone billpayer services by opening an account with a bank or financial institution that offers these services. Payment is automatically transferred to RT, and RT mails the purchaser the order.
4. Pre-authorized funds transfer (PAFT). Pass and ticket purchasers can have standing orders that are processed monthly and paid for by direct (electronic) funds transfer from their bank accounts. Their bank accounts are automatically debited and the orders are mailed out by RT.
5. Vending machines. Users can purchase strips of tickets at three vending machine locations in the RT service area.

The methods were introduced sequentially with a period of at least three months between introduction of successive methods. Each method was therefore evaluated on its own merit and on the effect of its introduction on the existing distribution system.

The main goals were to determine the cost effectiveness of the new distribution methods and to design an efficient TFP distribution network. The low sales through the new methods limited the possibilities for redesign of the TFP distribution network to improve its efficiency.

7.1 FINDINGS

7.1.1 Planning and Implementation

Implementation of each method was preceded by a planning phase. A marketing campaign was carried out immediately before each method was implemented.

There were few problems with planning and implementing mail order and telephone. The marketing campaign for each distribution method consisted of newspaper advertisements, posters at outlets, signs and posters on buses, and radio advertisements.¹ Each campaign ran for a two-week period immediately before the TFP distribution method became available to customers. RT staff believe in retrospect that the marketing campaign for telephone order was carried out too early in the month; the one-week gap between the end of the campaign and the deadline for ordering passes for the next month contributed to the low response to the program.

ATP was somewhat more difficult to plan and implement because RT had trouble finding financial institutions who were willing to participate and who had a sufficient number of depositors in the RT service area. There was little participation in this program by financial institutions throughout the demonstration.

PAFT requires a financial institution that is a member of the local automated clearing house to act as the originating financial institution for account debits. This method is by far the easiest of the new methods for RT to operate because so much of the record keeping and payment is automated. But there have been some problems with accounts that have been closed or have insufficient funds; there is usually a long delay before RT is made aware of the problem, and RT is then responsible for collection in these cases.

The vending machines had a long lead time for planning and implementation because they were completely new devices. The original plan was to purchase eight machines, but the amount in the grant was sufficient to purchase only three machines. The machines have been plagued by mechanical problems which have made them unreliable. Vending machine sales remain low.

¹The marketing campaign for telephone order included television spots.

7.1.2 User Response

TFP sales through the new methods account for about 3 per cent of all TFP sales. Mail order and telephone order patronage decreased since the methods were first introduced, but began to increase in the latter half of 1983. Monthly orders are now about 220 for mail order and 50 for telephone order. ATP and PAFT patronage have remained at about 3 and 14 orders per month.

Users of the new methods are primarily monthly pass and ticket users who had purchased their passes and tickets mainly from public outlets. Some users switched their method of fare payment or began to ride RT when they began to use the new methods. But the new methods have attracted few new TFP users, and have had an insignificant effect on RT patronage. In general, the new methods appear to compete primarily with sales outlets rather than with each other.

Users of the new methods are well pleased with the service. Passes are seldom received after the first of the month. The average times from order to delivery are about 5 days for mail order, 2 days for telephone order, and between 5 and 10 days for ATP; PAFT requires a lead time of one to two months for the initial order, but the order is processed automatically each month thereafter.

Lack of an ongoing marketing program has contributed to the decline in patronage through the new methods. There has, until recently, been no follow up to the initial marketing campaigns, and thus no way to make up for natural attrition in patronage by informing potential new users of the methods. Recent limited marketing efforts appear to have generated new customers through the new methods.

The new TFP distribution methods cannot by themselves attract significant numbers of monthly pass users. The market for monthly passes is predetermined by existing riding behavior and the price of the pass in relation to a single ride.

Tickets are not purchased by many cash users because it is inconvenient to buy them. Surveys of nonusers indicate that there is low awareness of the new methods. Informational marketing of the new methods could therefore result in increased ticket sales.

Users of the new methods have received some benefits, primarily an increase in convenience in purchasing monthly passes and tickets, but the user benefits do not appear to be very large. If the new methods were discontinued, most current users

would continue to purchase monthly passes and stamps through outlets. Most others would pay their fares with cash. Only a small fraction of users would stop riding RT altogether.

7.1.3 Costs, Productivity, and Cost Effectiveness

One of the goals of the demonstration was to determine the fixed and variable costs of the TFP distribution methods in use. This goal was not realized because reported operating costs were not well correlated with sales volumes. Attempts to determine statistically the fixed and variable operating costs were unsuccessful because of the high variance of operating costs in relation to sales volumes. The major fixed costs can be estimated for PAFT because they are significant and easily identifiable, but variable costs cannot be estimated because the range of sales volumes was so small.

The startup costs of the new methods, except vending machines, consisted primarily of costs of the marketing campaigns. The size of each marketing campaign, and therefore its cost, was decided on by RT prior to implementation. There is no relationship between startup cost and program size for mail order, telephone order, ATP, and PAFT. RT's reported startup costs are probably lower than the costs that would be incurred by other transit operators because much of the necessary research on implementing the new distribution methods was carried out as part of the work for the grant application.

Introduction of a new method had no discernable effect on the cost of existing methods. This is to be expected in view of the low sales volumes through the new methods and the independence of the operating procedures of different distribution methods.

The cost effectiveness of the methods was measured by their operating expenses as a percentage of revenues received. Outlets remain the most cost-effective method (1.9% for monthly passes and 2.9% for tickets). Mail order (14.4%) is the most cost-effective of the new methods, followed by telephone order (25.4%), PAFT (25.8%) and ATP (28.2%). These figures are based on patronage during 1983. Recent increases in processing charges for PAFT have raised its costs to about half of the revenues received through this method. PAFT is therefore now the least cost-effective method of TFP distribution.

Mail order and telephone order would probably be somewhat more cost-effective if sales were higher. PAFT would be much more cost-effective if its sales were greater because its fixed costs are a high percentage of its total operating cost. If PAFT sales were equivalent to current mail order sales, PAFT would be the most cost effective of any of the new distribution methods.

The operating cost percentage for telephone order cannot be less than 5% because of the credit card discount fee on all orders; with higher patronage, the percentage might drop to as low as 15%. The figure for ATP is very uncertain because it is based on only 4 orders per month; but it is reasonable to expect that it also would be more cost-effective if patronage were to increase.

Total RT Fare Prepayment Department costs would not be significantly affected if RT were to drop its least cost-effective distribution methods: telephone order, ATP, and PAFT. The same staff size would be needed to handle current outlet and mail order sales. RT would realize cost savings from dropping the least cost-effective methods to the extent that the fare prepayment staff time that would be saved could be used for other duties within RT.

The new distribution methods are much less cost-effective to operate than outlets. Even outlets with very low sales volumes are more efficient than mail order, the most cost-effective of the new methods. It may therefore not be economically justifiable to drop low-volume outlets from the sales network.

7.2 CONCLUSIONS

Four of the new TFP distribution methods -- mail order, telephone order, ATP, and PAFT -- are clearly workable. There were few problems in their planning and implementation, and the methods are well-liked by their users. These methods provide useful alternatives to outlets, especially since the number of outlets has declined.

There would be no significant cost savings from dropping the least cost-effective methods because the same number of persons would be needed to operate outlets and mail order service.

Some of the operations in the Fare Prepayment Department, especially record keeping and organization, could be automated, resulting in significant staff time

savings. Added benefits of automation would be greater security of records and the ability to offer multiple-month ordering for mail order and telephone order.

The demonstration results are timely for RT in view of its future. Self-service fare collection will be used for the new light rail system. RT must therefore consider how it will sell TFP items to rail riders. Vending machines will probably be installed at the stations. But the success of RT's TFP distribution network will be essential to the success of self-service fare collection.

7.3 TRANSFERABILITY OF RESULTS

RT's experience with planning and implementing the new TFP distribution methods should be transferable to most metropolitan areas. Implementation of mail order, telephone order, and PAFT would probably proceed in the same way in any area. ATP may be easier to implement in areas where bill paying by telephone is more common than in Sacramento, such as Los Angeles.

The findings of this demonstration on the cost effectiveness of TFP distribution methods are most easily transferable to transit operators with an existing fare prepayment program with TFP sales equal to or greater than those at RT, and have a TFP distribution network in place. The conclusions on the relative cost effectiveness of the new TFP distribution methods should hold for most transit agencies.

Transit operators with significantly higher volumes of TFP sales should expect greater cost effectiveness from mail order, telephone order, ATP, and PAFT than achieved at RT. The cost effectiveness of PAFT would be comparable to that of mail order at sales volumes of about 100 orders per month because of the small amount of labor needed to process orders once they have been entered on the computer.

Mail order is probably a useful method even for transit properties with lower TFP sales than RT. But telephone order, ATP, and PAFT would not be cost-effective for smaller operators because sales would be too low.

Much of the success in planning and implementing the new distribution methods was due to the presence of a fare prepayment manager who was well-experienced with transit fare prepayment. Transit properties without such an individual should expect a

significant amount of time for learning how to develop procedures for operating a TFP distribution network.

The results of this demonstration should be especially interesting to transit properties that are considering self-service fare collection. If they are not to rely solely on vending machines, these properties will have to consider alternatives for a TFP distribution network. The conclusions of this evaluation should be particularly applicable when high sales volumes are anticipated.

APPENDIX A

OPERATING PROCEDURES FOR TFP DISTRIBUTION METHODS

The RT Fare Prepayment Department has set forth a set of operating procedures for each of the TFP distribution methods. The procedures are presented as follows:

1. Schedule of outlet procedures--A chronological sequence of outlet handling procedures for operations over a month.
2. Operating procedures for each TFP distribution method:
 - Outlets
 - Mail Order
 - Telephone Order
 - Automatic Telephone Payment (ATP)
 - Pre-Authorized Funds Transfer (PAFT)
3. A special set of procedures for processing the PAFT diskette.

Four other procedures, which are not described here, are done quarterly or annually.

1. Quarterly audit of monthly pass and stamp sales at outlets.
2. Quarterly audit of ticket sales at outlets.
3. Annual opening of elementary and secondary school outlets (August).
4. Annual closure of elementary and secondary school outlets (June).

SCHEDULE OF OPERATING PROCEDURES FOR OUTLETS

<u>DAY OF MONTH</u>	<u>ACTIVITY</u>
29-30	<u>Order Placement/Recognition</u> <ul style="list-style-type: none">● RT prepayment staff pull last month's pink invoice sheets for every outlet.● Adjust the previous orders for seasonal fluctuations for all public and some private outlets.● Quantities of passes and stamps to be issued for next month are marked on last month's pink invoice sheet for all public and some private outlets.
31-1	<ul style="list-style-type: none">● Type new employer and some private outlet invoices as order cards are received● Type new public and remaining private outlet invoices from marked-up pink invoice sheets.
1-10	<u>Order Processing</u> <ul style="list-style-type: none">● Packaging of passes and stamps. The serial numbers of all passes and stamps are manually recorded on each invoice.● Serial numbers of instruments and number of instruments are recorded on a <u>Serialized Listing</u> accounting record.● Pink invoice sheets for new orders are pulled and checked for correct number of instruments packaged versus the numbers listed on the invoice.● <u>Monthly Pass and Stamp Report</u> is updated with respect to passes and stamps issued.● Quantities of passes and stamps issued, their serial numbers, and the amount due are recorded in the prepayment department <u>Ledger Book</u>. Employer outlets are recorded separately from public and private outlets.
5-6	<u>Collection</u> <ul style="list-style-type: none">● RT begins receiving payments for the previous month (the collection process is simultaneous with the distribution process).● Begins receiving returned passes and stamps via outlet courier or certified mail.

<u>DATE</u>	<u>ACTIVITY</u>
5-18	<ul style="list-style-type: none"> ● Returned invoices are checked against the returned numbers of passes, stamps, and payments. ● Accounts received are put into deposit book. ● Serial numbers of passes and stamps returned are recorded. ● If only instruments are returned, then only a blue invoice sheet should accompany. ● If only payments are returned, then only a yellow invoice sheet should accompany. ● If both instruments and payment are returned at the same time, then both the blue and yellow invoice sheets should accompany. ● White invoice sheet is kept by outlet. ● Outlet payments are deposited daily with RT cashier. ● Prepayment department keeps returned passes and stamps. ● Returned and sold passes and stamps are recorded on the <u>Monthly Pass and Stamp Report</u>. ● Serial number of returned passes and stamps, adjusted credit, and amount due are recorded in the <u>Ledger Book</u>. ● <u>Total Activity Summary</u> is constantly updated with all collection events in chronological order for each outlet.
11-15	<ul style="list-style-type: none"> ● RT receives payments and returned passes and stamps from public outlets. ● RT telephones or sends a reminder card to all delinquent public outlets. ● Two large outlets, Sacramento Savings and Loan (18 outlets) and Weinstocks (4 outlets), funnel all returning transactions through their main office. RT doesn't bill either main office until the 15th.
	<u>Distribution</u>
18-25	<ul style="list-style-type: none"> ● Two delivery clerks hand carry packages of passes and stamps between the 18th and 25th. ● Two delivery clerks hand carry the packages between the 18th and 25th. ● A marigold invoice sheet is signed by each outlet as a receipt for RT. ● If an outlet has a large number of passes and stamps which they did not want to send to RT, then these instruments are given to RT's delivery clerks at this time.
25-5	<ul style="list-style-type: none"> ● Employer and private outlets sell instruments.
25-10	<ul style="list-style-type: none"> ● Public outlets sell instruments.

1. P/S Collection:

- a) Mail Collection: We receive mail at or about 9:00 a.m. everyday. mail is then sorted into stacks, mail order stack #1, payments stack #2, order cards stack #3. Payments are then done as follows: First the date is put on the top of the invoice then the persons initials who processed the invoice then the fact wether we have received the returns or not and if not the the words "NO RETURNS" should appear. Then the actual returns are tabulated and recorded on the specified locations on the invoices and are multiplied out to have a balance returned, the balance returned subtracted from the actual amount issued should then give you an outstanding balance due. After you have done the mathmatics part of the invoice you are the able to count any cash or checks that may have been returned with the invoice. Count all cash and checks to verify that you have gotten the full amount owed to us by the outlet. Some outlets in the case of some of the Junior Colleges the will send partial payments then at a later date they will send you the full amount due (these are the exception to the rule). Once this process is finished the checks and the cash if any are then written up on (duplicate) receipt book indicating wether it is p/s, tickets, or mail order, or telephone order what ever the case may be in the upper right hand corner of the receipt also the month of which the outlet is paying for in the upper right hand corner of the receipt, the date is also indicated on the receipt. The Outlets name is indicated on the receipt and the amount that they are paying. This is then given to Becky Wah or in Becky's absence to Helen Williams to be verified and initialed then given back to me to hand deliver to the cashier's office downstairs and deposited.
- b) Walk-ins: Walk-ins are handled basically the same as mail in payments are the only difference is that the outlet is presant at the time of counting the returns and or payment. The outlet is also given a copy of the finished product (invoice only) and is sent on there way. Everything else is the same proceedure as mail in payments.

2. DISTRIBUTION

- a) Invoice Preparation: On or about the 3rd of each month I receive from Irene all the pink invoices from the previous month invoices and I type from them the new months order. Irene is the one who will make the changes if any to the invoice. I only type what is already there.
- b) Packaging: Packaging is only done as a back up to Irene when she is ill or busy doing something else. There have been occasions where I for some reason will be slow at the time Irene is packaging and therefore will help her if she needs to be helped ie.. in November and December we have to have the packages ready at an earlier date than normal sometimes as much as a week earlier therefore I will help her when the need arises.

3. MAIL ORDER

- a) Processing: First, I open mail and arrange them in stacks according to what it is that they are ordering ie... Monthly passes, E/H stamps, Zone stamps, and Student stamps. They are then counted up and written on a piece of paper and then given to Irene or Becky to fill the order for me. Once I have the merchandise form Irene I then record them on a master listing for that particular month they are then ready for processing. Step #1: The serial number is recorded on a green accounting ledger. Step #2: The serial number is recorded on the reverse side of the order form also recorded on the order form is the amount of the check and the date in which the order was processed. Step #3: The serial number and the item purchased is recorded on the reverse side of the check also indicated is the fact that it is mail order. Step #4: The item purchased is stapled to the inside envelope and the envelope is sealed and is ready to be mailed. Step #5: When all merchandise is completed all the processes above the total is tabulated and balanced before it can be checked off by Becky. Step #6: The items are recorded on a (triplicate) receipt book with the break down of the amount of passes purchased by the customers. Step #7: Becky then checks the amounts and initials them and returns them to me to deposit. Step #8: The information is then recorded on 3X5 cards all the information that is given on the back of the order forms. Mail Order is complete when the merchandise is deposited with the Cashier downstairs and the merchandise is mailed out to the customer.

3. CONTINUED

b) Accounting Deposits: These were explained in number 3.b

4. TELEPHONE ORDER

a) Processing: Basically, Telephone Order is done in the same fashion as Mail Order is done the only difference is that for Telephone Order you have to make up individual bank drafts indicating on the drafts the date, department, initials of individual processing order, the quantity, description of the items bought, the unit cost, the amount of the items purchased the sub-total, the fact that it is a telephone order the name of the purchaser, address, account number, and the expiration date of the purchasers Master-card or Visa charge cards. Also included is the authorization number given to us from the bank authorization center by calling a special number the number is as follows: to contact a computer and use the touch tone phone the number is a toll free number 1-800-652-1370. To reach to bank directly the number to call is 1-800-792-2900 and an operator will answer and help you you must give the operator the account number expiration date of the card, wether it is mail order or a telephone order, and on some occasions the name of the card holder and the address of the card holder. All this information is indicated on the bank transmittal. When you have this all completed you have to fill out a bank deposit slip, indicating the total amounts of all the order purchased. NOTE: If you are processing both tickets and passes and stamps you will have to indicate them all on seperate deposit slips. Also if for some reason something is left off the transmittal the chances of the bank regecting it are pretty great. SO DOUBLE CHECK ALL THE INFORMATION!

b) Accounting Deposits: These are handled in the same fashion as mail order is deposited with accounting.

ATP PROCEDURES

NOTE: ALL PROCEDURES MUST BE PROCESSED WITHIN TWENTY-FOUR (24) HOURS OF ORDER RECEIPT.

1. A statement of activity will be sent to RT as customers of the FI's initiate transactions.
2. The statement will reflect the customer's name and address, an account number(s) and the amount being paid.
3. The name and address is to whom and where the item(s) purchased should be sent.
4. The account number will indicate which item(s) are being purchased.
5. The amount, when divided by the individual price of the item, will indicate the quantity being purchased.
6. The account numbers for Allstate are:
 - full fare mtly pass
 - senior/handicapped mon sp
 - zone mtly stamp
 - student mtly stamp
 - book 25¢tickets
 - book 50¢tickets
 - book 60¢tickets
7. The account numbers for First Interstate are:
 - full fare mtly pass
 - S/H mtly stamp
 - zone mtly stamp
 - student mtly stamp
 - book 25¢T
 - book 50¢T
 - book 60¢T
8. Upon receipt of the statement, pull the file card for each customer listed. If a file card does not exist, prepare one. The file card is to show the customer's name, address and which FI they are purchasing through.
9. Determine the item(s) being purchased by the account numbers after their name.
10. Determine the quantity of the item(s) being purchased.
11. Process order the same as mail order.
12. Put the following information on the file card: date, serial number(s) of item(s) purchased, item(s) purchased and amount paid.

13. Have statement and corresponding ledger entries approved by DAJ.
14. Mail orders to customers.

BFB:lld
6/28/82

PAFT Procedures

1. When receiving telephone inquiry, obtain name, mailing address and day-time (8:30 am - 4:30 pm) telephone number.
2. Mail pre-authorized letter, PAFT debit form, PAFT wallet card and pre-addressed return RT letterhead envelope in a RT envelope.
3. Prepare file card for all inquiries. Indicate date form sent and how inquired ie. telephone or coupon.
4. Upon receipt of completed form stamp date received on back, indicate date received on customer's file card and verify information filled in against customer's sample check. If information appears to be correct, make a copy of form and return to customer with appropriate information filled in on the xerox response form. (See attached).
5. All forms are to be entered into the computer at one time on the 14th of each month.
6. The first month a customer goes through the system it will be as a "pre-note" and a zero dollar value will be indicated.
7. If the "pre-note" is accepted, the second month the customer's file will go through the system with the appropriate dollar value indicated.
8. The diskette will be delivered by a department member on the days indicated on the attached schedule, to the B of A branch at Alhambra.
9. B of A will notify us when the diskette and a register are ready for us to pick up.
10. The customer orders will be prepared by us and ready for mailing upon receipt of the register from B of A.
11. The order preparation ie. recording of items issued, should be done in the same fashion as mail order.
12. Upon receipt of the register, the appropriate serial number for the item(s) purchased must be placed next to the customer's name.
13. Upon approval of register and issues by BFB, orders are to be mailed.
14. Be prepared for lots of questions from the customers as there will be confusion over the lengthy lead time before they receive their first order.

~~BFB~~
7/28/82

PAFT Diskette
Procedures

1. Do visual verification of each customer record.
2. Run diskette
3. Run tape for total amount of debit entries from pre-authorized forms.
4. Compare tape total with total debits shown on batch sheet received from Systems with diskette.
5. Prepare two (2) transmittal sheets. One goes in cannister with the diskette, the other is used for our receipt and is signed by bank personnel.
6. Deliver diskette in cannister to B of A, Alhambra, by 3:00 p.m. Get transmittal signed.
7. Staple signed transmittal sheet to batch sheet received from Systems and file.

PAFT Diskette
Processing Schedule

<u>Month</u>	<u>Day Diskette to be delivered to B of A (File Date)</u>	<u>Debit (Entry Date) Day</u>
Nov. '82	15th	18th
Dec. '82	15th	20th
Jan. '83	14th	19th

BFB:11d ~~EB~~
10/19/82

APPENDIX B DATA COLLECTIONS

Two types of data were used in this evaluation: Fare Prepayment Department operations and surveys. Each is discussed in a separate section.

B.1 FARE PREPAYMENT DEPARTMENT OPERATIONS

The Fare Prepayment Department kept detailed records of sales, revenues, and costs throughout the demonstration. Some records are kept by RT as part of their normal reporting procedures; detailed data on operating costs were recorded specifically for the evaluation.

The main source of sales and revenue data is the sales and Revenue Report (Figure B-1). This report, issued monthly, shows the monthly passes and tickets sold and the revenues from each by TFP distribution method. Monthly passes and stamps are shown for the month in which they were used (e.g., passes for March show on the March report, although they were sold in February). Tickets are shown for the month in which they were bought.

A special report on expenses by TFP distribution method was developed for the evaluation (Figure B-2). This report gives a breakdown of labor (management and clerical) and expenses by method. Some analyses for the evaluation required knowledge of the number of orders, rather than the number of items sold, by TFP distribution method. These data were available from the Monthly Progress Reports, which were issued especially for this demonstration. (Figure B-3)

This report was derived from an earlier reporting form used by RT, the hours and costs report (Figure B-4). Both the Expense Report and the Hours and Costs Report are derived from detailed time sheets kept by Fare Prepayment Department staff. Each person in the department kept a time sheet showing the time spent on each activity to the nearest 10 minutes.

SACRAMENTO REGIONAL TRANSIT DISTRICT
SALES and REVENUE REPORT

FARE PREPAYMENT DEPT.
BW:lld

PERIOD ENDING: March, 1983

TFP METHOD	SOLD	REVENUE
OUTLET - EMPLOYER		
Pass	828	\$19,872
S/H Stamp	48	480
Zone Stamp	69	690
Student Stamp	104	1,664
OUTLET - PRIVATE		
Pass	690	16,560
S/H Stamp	259	2,590
Zone Stamp	22	220
Student Stamp	3,041	48,656
OUTLET - PUBLIC		
Pass	1,998	47,952
S/H Stamp	1,729	17,290
Zone Stamp	133	1,330
Student Stamp	1,975	31,600
MAIL ORDER		
Pass	70	1,680
S/H Stamp	34	340
Zone Stamp	3	30
Student Stamp	88	1,408
TELEPHONE ORDER		
Pass	16	384
S/H Stamp	4	40
Zone Stamp	2	20
Student Stamp	14	224
ATP		
Pass	1	24
S/H Stamp	3	30
Zone Stamp	-0-	-0-
Student Stamp	-0-	-0-
PAFT		
Pass	5	120
S/H Stamp	4	40
Zone Stamp	-0-	-0-
Student Stamp	6	96
TOTAL		
Pass	3,608	86,592
S/H Stamp	2,081	20,810
Zone Stamp	229	2,290
Student Stamp	5,228	83,648
OUTLET - EMPLOYER		
20¢ Ticket Books	-0-	-0-
25¢ Ticket Books	38	114
50¢ Ticket Books	3	18
60¢ Ticket Books	412	2,472
OUTLET - PRIVATE*		
20¢ Ticket Books	-0-	-0-
25¢ Ticket Books	139	417
50¢ Ticket Books	325	1,950
60¢ Ticket Books	68	408
OUTLET - PUBLIC		
20¢ Ticket Books	-0-	-0-
25¢ Ticket Books	224	672
50¢ Ticket Books	538	3,228
60¢ Ticket Books	3,756	22,536

FIGURE B-1. SALES AND REVENUE REPORT

TFP METHOD	SOLD	REVENUE
<u>MAIL ORDER</u>		
20¢ Ticket Books	-0-	-0-
25¢ Ticket Books	5	15
50¢ Ticket Books	34	204
60¢ Ticket Books	91	546
<u>TELEPHONE ORDER</u>		
20¢ Ticket Books	-0-	-0-
25¢ Ticket Books	1	3
50¢ Ticket Books	2	12
60¢ Ticket Books	28	168
<u>TOTAL</u>		
20¢ Ticket Books	-0-	-0-
25¢ Ticket Books	407	1,221
50¢ Ticket Books	902	5,412
60¢ Ticket Books	4,355	26,130

*includes school activity and transactions

BFB:lld

FIGURE B-1. SALES AND REVENUE REPORT (CONT)

Sacramento Regional Transit District
 FARE PREPAYMENT EXPENSE REPORT
 Period Ending: March, 1983

ACTIVITY	HOURS			COSTS		
	Mgmt.	Clerical	TOTAL	Mgmt.	Clerical	TOTAL
OUTLETS						
Administration	107.88	45.75	153.53	1,338.62	346.25	1,684.87
Order Plcmt/ Recog.	1.75	4.50	6.25	19.13	35.53	54.66
Order Processing	3.00	74.50	77.50	32.79	527.98	560.77
Distribution	---	---	---	---	---	---
Collection	35.25	77.25	112.50	387.72	547.80	935.52
Postage						
MAIL ORDER						
Development	---	---	---	---	---	---
Administration	.75	.25	1.00	11.85	1.95	13.80
Marketing	---	---	---	---	---	---
Order Processing	2.75	58.25	61.00	30.06	422.71	452.77
Postage						46.40
TELEPHONE ORDER						
Development	---	---	---	---	---	---
Administration	.25	---	.25	3.95	---	3.95
Marketing	---	---	---	---	---	---
Order Processing	2.25	6.50	8.75	24.59	49.37	73.96
Postage						7.40
ATP						
Development	---	---	---	---	---	---
Administration	---	---	---	---	---	---
Marketing	---	---	---	---	---	---
Order Processing	.25	.63	.88	2.73	4.37	7.10
Postage						.80
PAFT						
Development	---	---	---	---	---	---
Administration	-.50	---	.50	6.68	---	6.68
Marketing	---	---	---	---	---	---
Order Processing	---	2.00	2.00	---	13.44	13.44
Postage						3.00
VENDING MACHINES						
Development	16.75	---	16.75	262.22	---	262.22
Administration	---	---	---	---	---	---
Marketing	---	---	---	---	---	---
Distribution	---	---	---	---	---	---
Collection	---	---	---	---	---	---
Capital Equipmt.	---	---	---	---	---	---

FIGURE B-2. FARE PREPAYMENT EXPENSE REPORTS



REGIONAL TRANSIT

P.O. BOX 2110 • 1400 29TH STREET • SACRAMENTO, CA 95810 • (916) 444-7591

Transit Fare Prepayment CA 06-0102 Progress Report - March, 1983

1. Pass/Stamp Sales: Three thousand six hundred eight (3,608) \$24 monthly passes, two thousand eighty-one (2,081) \$10 senior/handicapped stamps, two hundred twenty-nine (229) \$10 zone stamps, and five thousand two hundred twenty-eight (5,228) \$16 student stamps were sold for March '83, yielding \$193,340 in revenue.
2. Pass/Stamp Outlet Status: Currently there are 30 employer outlets, 22 private outlets, 38 public outlets, 21 secondary schools, totaling 111 outlets.
3. Ticket Sales: A total of 407 books of 25¢ tickets, 902 books of 50¢ tickets, and 4,355 books of 60¢ tickets were sold, yielding \$32,763 in revenues.
4. Mail Order: Two hundred thirty-two (232) orders were processed in March '83. Items sold were: 77 passes, 42 senior/handicapped stamps, 3 zone stamps, 95 student stamps, 89 - 60¢ ticket books, 32 - 50¢ ticket books, and 5 - 25¢ ticket books, for a total of 343 items sold. Revenue received totaled \$4,559.
5. Telephone Order: Thirty-seven (37) orders were processed in March '83. Items sold were: 13 passes, 3 senior/handicapped stamps, 0 - zone stamps, 14 student stamps, 24 - 60¢ ticket books, 4 - 50¢ ticket books, and 1 - 25¢ ticket books, for a total of 59 items sold. Revenue received totaled \$737.
6. ATP: Four orders were processed in March '83 for April '83 items. Items sold were: 1 - \$24 pass and 3 - \$10 senior/handicapped stamps, yielding \$54 in revenues.
7. PAFT: Fifteen debits were processed in March '83 for April '83 items. Items sold were: 5 - \$24 passes, 5 - \$10 senior/handicapped stamps, and 5 - \$16 student stamps, yielding \$250 in revenues.
8. Vending Machines: On schedule.
9. Post Implementation Survey: Crain & Associates has prepared final draft survey forms, the instructions for survey workers and field control sheets for the on-board survey, and instructions for the interviewers for the telephone survey. Data on the customers who have volunteered to participate in the telephone survey have been recorded. The \$1.00 coupons will be mailed out. The Pre-test has been tentatively scheduled for April 25, on-board survey for the week of May 2, and the telephone survey scheduled 2 weeks after the on-board survey.
10. Mail Order Survey: The Mail Order survey has been received by Crain & Associates.
11. Telephone Order Survey: The Telephone Order survey has been received by Crain & Associates.

Sacramento Regional Transit, a Public Entity, is an Equal Opportunity Employer.

FARE PREPAYMENT DEPARTMENT
Hours and Costs

MONTH ENDING: March, 1983

ACTIVITY	MGMNT. HOURS	CLERICAL HOURS	TOTAL HOURS	MGMNT. COST	CLERICAL COST	TOTAL COST
Collection P/S	30.00	61.50	91.50	330.34	432.40	762.74
Distribution P/S	2.25	60.50	62.75	24.59	432.92	457.51
Gen. Outlet Cont. P/S	8.50	5.75	14.25	112.39	44.79	157.18
New Outlet Cont. P/S	.75	---	.75	8.20	---	8.20
General P/S	25.00	42.50	67.50	346.30	319.32	665.62
Collection T	5.25	13.75	19.00	57.38	100.50	157.88
Distribution T	2.50	15.75	18.25	27.33	116.11	143.44
Gen. Outlet Cont. T	6.00	---	6.00	81.41	---	81.41
New Outlet Cont. T	2.00	---	2.00	21.86	---	21.86
General T	64.63	2.25	66.88	746.58	17.53	764.11
M. O. Admin.	.75	.25	1.00	11.85	1.95	13.80
M. O. Process.	2.75	58.25	61.00	30.06	422.71	452.77
T. O. Admin.	.25	---	.25	3.95	---	3.95
T. O. Process.	2.25	6.50	8.75	24.59	49.37	73.96
ATP Admin.	---	---	---	---	---	---
ATP Order Proc.	.25	.63	.88	2.73	4.37	7.10
PAFT Admin.	.50	---	.50	6.68	---	6.68
PAFT Order Proc.	---	2.00	2.00	---	13.44	13.44
Vend. Mach. R & D	16.75	---	16.75	262.22	---	262.22
" " Mktg. Camp.	---	---	---	---	---	---
UMTA Reports	3.25	3.25	6.50	51.35	25.32	76.67
Data Collect. Gen.	13.00	12.75	25.75	160.35	99.32	259.67
Ad Cont. Admin.	---	---	---	---	---	---
Schl. Outlets Admin.	3.00	---	3.00	43.75	---	43.75
Data Collection RFP	---	---	---	---	---	---
Post Imp. Survey	23.75	52.50	76.25	338.73	368.89	707.62

FIGURE B-4. HOURS AND COSTS REPORT

RT also issues summary statements on pass and ticket sales (Figures B-5 and B-6). These reports were used in the evaluation to supplement the information from the Sales Revenue Report.

B.2 SURVEYS

B.2.1 Pre-Implementation Survey

A pre-implementation survey of RT passengers was conducted in October 1981. The purpose of the survey was to measure the characteristics, awareness, and attitudes of RT passengers by method of fare payment.

Four different questionnaires were developed, one for each fare payment method (see Figures B-7 through B-10). Surveyors were stationed at the front of buses to hand out questionnaires to passengers as they boarded. Each person who boarded a bus was given a questionnaire, the type of which depended on how the passenger paid his fare. The questionnaires were color-coded to make it easier for the surveyors to identify which type to hand out.

A sample of bus trips was selected from 22 routes that were selected from the RT system. These were chosen to cover most of the RT service area.¹ The routes in the sample had average to high productivities. Trips on the routes were selected to provide coverage throughout the day (6 AM to 7 PM) and to facilitate survey operations.

A total of 2,653 passengers boarded the buses that were surveyed. There were 1,981 surveys returned, out of which 1,860 were usable. The breakdown of surveys by fare type is as follows:

Monthly pass	692
Ticket	33
Daily pass	584
Cash	<u>551</u>
Total	1,860

¹The sample did not cover routes that were to be dropped by RT: routes in Yolo County and along the Folsom Corridor.

PPP Item	Jan. '83		Feb. '83		Mar. '83		Jan '83 - Mar '83		Feb '83 - Mar '83		Jan '82 - Mar '82	
	Sales/Revenues	Revenue Increase (Decrease)	Sales/Revenues	Revenue Increase (Decrease)	Sales/Revenues	Revenue Increase (Decrease)	Jan '83 - Mar '83	Revenue Increase (Decrease)	Feb '83 - Mar '83	Revenue Increase (Decrease)	Jan '82 - Mar '82	Revenue Increase (Decrease)
Monthly Pass	3,094/\$74,256	\$ 6,816	3,378/\$81,072	\$ 6,816	3,608/\$86,592	\$ 5,520	\$ 12,336	\$ 5,520	\$ 11,448	\$ 13,320	\$ 13,320	\$ 13,320
S/H Stamp	2,093/ 20,930	(50)	2,088/ 20,880	(50)	2,081/ 20,810	(70)	(120)	(70)	(360)	144	240	5,700
Zone Stamp	210/ 2,100	110	221/ 2,210	110	229/ 2,290	80	190	80	410	240	240	240
Student Stamp	5,015/ 80,240	2,160	5,150/ 82,400	2,160	5,228/ 83,648	1,248	3,408	1,248	2,688	5,700	5,700	5,700
TOTAL	\$177,526	\$ 9,036	\$186,562	\$ 9,036	\$193,340	\$ 6,778	\$ 15,814	\$ 6,778	\$ 14,186	\$ 19,404	\$ 19,404	\$ 19,404
Monthly Pass	3,864/\$92,736	\$ 1,872	3,942/\$94,608	\$ 1,872	4,419/\$106,056	\$11,448	\$ 13,320	\$11,448	\$11,448	\$ 13,320	\$ 13,320	\$ 13,320
S/H Stamp	2,813/ 22,504	504	2,876/ 23,008	504	2,831/ 22,648	(360)	144	(360)	(360)	144	240	5,700
Zone Stamp	233/ 2,330	(170)	216/ 2,160	(170)	257/ 2,570	410	190	410	410	240	240	240
Student Stamp	6,118/ 73,416	3,012	6,369/ 76,428	3,012	6,593/ 79,116	2,688	3,408	2,688	2,688	5,700	5,700	5,700
TOTAL	\$190,986	\$ 5,218	\$196,204	\$ 5,218	\$210,390	\$14,186	\$ 19,404	\$14,186	\$14,186	\$ 19,404	\$ 19,404	\$ 19,404

FIGURE B-5. MONTHLY PASS AND STAMP SALES REPORT

TICKET SALES---FARE PREPAYMENT

	1981-1982						1982-1983					
	20¢ Books	25¢ Books	50¢ Books	60¢ Books	20¢ Books	25¢ Books	50¢ Books	60¢ Books	20¢ Books	25¢ Books	50¢ Books	60¢ Books
Jul.	252 + 2 tickets	865	2,989	261		38	662	1,752			4,876	
Aug.	15	401	1,204	1,123		7	413	881			3,196	
Sept.	-0-	394	1,064	1,237		4	534	1,844			4,141	
Oct.	19	342	792	1,685		-0-	798	956			3,367	
Nov.	4	345	1,267	3,211		-0-	343	980			3,799	
Dec.	5	230	765	2,263		-0-	386	1,130			3,850	
Jan.	5	288	1,062	3,018		-0-	449	851			4,679	
Feb.	2	253	785	2,704		-0-	395	969			4,496	
Mar.	-0-	264	810	2,958		-0-	407	902			4,355	
Apr.	2	192	1,057	2,528								
May	18	437	1,534	5,543								
June	15	354	1,151	3,059								
TOTAL.	337 + 2 tickets	4,365	14,480	29,590								

FIGURE B-6. TICKET SALES REPORT

Regional Transit Bus Rider Survey.
Please fill out and return to the
person distributing surveys.

MONTHLY PASS/STAMP SURVEY

Survey type 1
Surveyor _____
Line # _____
Time _____ AM _____ PM
DAY _____

THIS SURVEY FORM IS FOR PASSENGERS WHO USED A MONTHLY PASS OR STAMP. IF YOU PAID CASH, BOUGHT OR USED A DAILY PASS, OR USED A TICKET, PLEASE RETURN THIS FORM TO THE SURVEY TAKER AND REQUEST THE CORRECT FORM FOR YOU.

5
6 - 7
8 - 10
11 - 14
15 - 16

<p>1. HOW MUCH IS YOUR MONTHLY PASS/STAMP WORTH, INCLUDING ANY SOME STAMPS?</p> <p>1. <input type="checkbox"/> \$8.00 3. <input type="checkbox"/> \$24.00 2. <input type="checkbox"/> \$12.00 4. <input type="checkbox"/> \$34.00</p>	<p>17</p>	<p>7. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK?</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 3 DAYS 6. <input type="checkbox"/> 6 DAYS 1. <input type="checkbox"/> 1 DAY 4. <input type="checkbox"/> 4 DAYS 7. <input type="checkbox"/> 7 DAYS 2. <input type="checkbox"/> 2 DAYS 5. <input type="checkbox"/> 5 DAYS</p>	<p>27</p>
<p>2. WHERE DID YOU PURCHASE (OR RECEIVE) YOUR MONTHLY PASS AND/OR STAMP?</p> <p>1. <input type="checkbox"/> MY EMPLOYER 2. <input type="checkbox"/> OTHER (Please Specify) _____</p>	<p>18</p>	<p>8. WHEN DID YOU START BUYING A PASS?</p> <p>MO. _____ / _____ YR. _____</p>	<p>28 31</p>
<p>3. IS SOME OR ALL OF THE COST OF YOUR PASS/STAMP PAID FOR BY SOMEONE ELSE?</p> <p>1. <input type="checkbox"/> NO 2. <input type="checkbox"/> YES</p> <p>HOW MUCH OF THE COST DID YOU PAY?</p> <p>1. <input type="checkbox"/> NOTHING 2. <input type="checkbox"/> \$ _____ (specify)</p>	<p>19 20 23</p>	<p>9. PRIOR TO BUYING MONTHLY PASSES, HOW DID YOU USUALLY PAY THE FARE?</p> <p>1. <input type="checkbox"/> CASH OR DAILY PASS 2. <input type="checkbox"/> TICKETS OR TOKENS 3. <input type="checkbox"/> DIDN'T RIDE RT BUSES</p>	<p>32</p>
<p>4. WHERE ARE YOU COMING FROM...</p> <p>1. <input type="checkbox"/> HOME? 5. <input type="checkbox"/> OTHER PERSONAL BUSINESS? 2. <input type="checkbox"/> WORK? 3. <input type="checkbox"/> SCHOOL? 4. <input type="checkbox"/> SHOPPING? 6. <input type="checkbox"/> MEDICAL OR DENTAL APPOINTMENT? 7. <input type="checkbox"/> OTHER?</p>	<p>24</p>	<p>10. DURING THE PAST 12 MONTHS, HOW MANY TIMES DID YOU PURCHASE A MONTHLY PASS OR STAMP? _____ TIMES</p>	<p>33 34</p>
<p>5. WHERE ARE YOU GOING TO...</p> <p>1. <input type="checkbox"/> HOME? 5. <input type="checkbox"/> OTHER PERSONAL BUSINESS? 2. <input type="checkbox"/> WORK? 3. <input type="checkbox"/> SCHOOL? 4. <input type="checkbox"/> SHOPPING? 6. <input type="checkbox"/> MEDICAL OR DENTAL APPOINTMENT? 7. <input type="checkbox"/> OTHER?</p>	<p>25</p>	<p>11. WHY DO YOU PURCHASE A MONTHLY PASS/STAMP? (PLEASE CHECK ALL APPROPRIATE ANSWERS.)</p> <p>1. <input type="checkbox"/> IT IS CHEAPER THAN THE REGULAR FARE OR A DAILY PASS 2. <input type="checkbox"/> IT IS MORE CONVENIENT THAN CARRYING CHANGE OR TICKETS 3. <input type="checkbox"/> OTHER (Please Specify) _____</p>	<p>35 37</p>
<p>6. HOW MANY TIMES DO YOU EXPECT TO BOARD AN RT BUS TODAY? (INCLUDE TRANSFERS AND TRIPS YOU HAVE ALREADY MADE TODAY.)</p> <p>1. <input type="checkbox"/> 1 TIME 4. <input type="checkbox"/> 4 TIMES 6. <input type="checkbox"/> 6 TIMES 2. <input type="checkbox"/> 2 TIMES 5. <input type="checkbox"/> 5 TIMES 7. <input type="checkbox"/> 7 OR MORE TIMES 3. <input type="checkbox"/> 3 TIMES</p>	<p>26</p>	<p>12. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 OR 6 TRIPS 6. <input type="checkbox"/> 11 OR 12 TRIPS 1. <input type="checkbox"/> 1 OR 2 TRIPS 4. <input type="checkbox"/> 7 OR 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS 2. <input type="checkbox"/> 3 OR 4 TRIPS 5. <input type="checkbox"/> 9 OR 10 TRIPS</p>	<p>38</p>
<p>Please continue to next column.</p>	<p>26</p>	<p>13. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 OR 6 TRIPS 6. <input type="checkbox"/> 11 OR 12 TRIPS 1. <input type="checkbox"/> 1 OR 2 TRIPS 4. <input type="checkbox"/> 7 OR 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS 2. <input type="checkbox"/> 3 OR 4 TRIPS 5. <input type="checkbox"/> 9 OR 10 TRIPS</p>	<p>39</p>

Please continue on to next page.

FIGURE B-7. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - MONTHLY PASS USERS

<p>continue</p> <p>14. ABOUT TWO MONTHS AGO, ON JULY 1, RT RAISED MANY OF ITS FARES. THINK BACK A FEW MONTHS. HAS THE NUMBER OF WEEKLY RT BUS TRIPS YOU TAKE INCREASED, DECREASED OR STAYED THE SAME SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> INCREASED BY _____ ONE-WAY TRIPS PER WEEK 2. <input type="checkbox"/> DECREASED BY _____ ONE-WAY TRIPS PER WEEK 3. <input type="checkbox"/> STAYED THE SAME 4. <input type="checkbox"/> I DIDN'T RIDE RT BUSES BEFORE JULY 1</p> <p>B. DID YOU CHANGE THE WAY YOU PAY FOR FARE SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> YES, PRIOR TO JULY 1, I PAID PRIMARILY BY: 1. <input type="checkbox"/> CASH 3. <input type="checkbox"/> DAILY PASS 2. <input type="checkbox"/> TOKEN OR TICKET 4. <input type="checkbox"/> MONTHLY PASS 2. <input type="checkbox"/> NO</p> <p>C. IF YOU DID CHANGE YOUR BUS USE SINCE JULY 1, WHAT WERE THE MOST IMPORTANT REASONS FOR THESE CHANGES?</p>	<p>40</p>	<p>continue</p> <p>17. DO YOU USUALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO</p> <p>18. YOUR SEX?</p> <p>1. <input type="checkbox"/> MALE 2. <input type="checkbox"/> FEMALE</p> <p>19. YOUR AGE?</p> <p>1. <input type="checkbox"/> UNDER 18 3. <input type="checkbox"/> 25-34 5. <input type="checkbox"/> 45-61 2. <input type="checkbox"/> 18-24 4. <input type="checkbox"/> 35-44 6. <input type="checkbox"/> 62 AND OVER</p> <p>20. YOUR TOTAL HOUSEHOLD INCOME?</p> <p>1. <input type="checkbox"/> UNDER 10,001 5. <input type="checkbox"/> \$25,001-\$30,000 2. <input type="checkbox"/> \$10,001-\$15,000 6. <input type="checkbox"/> \$30,001-\$40,000 3. <input type="checkbox"/> \$15,001-\$20,000 7. <input type="checkbox"/> \$40,001-\$50,000 4. <input type="checkbox"/> \$20,001-\$25,000 8. <input type="checkbox"/> OVER \$50,000</p> <p>21. YOUR ETHNIC BACKGROUND?</p> <p>1. <input type="checkbox"/> ASIAN 4. <input type="checkbox"/> AMERICAN INDIAN 2. <input type="checkbox"/> BLACK 5. <input type="checkbox"/> WHITE 3. <input type="checkbox"/> MEXICAN OR HISPANIC 6. <input type="checkbox"/> OTHER (Please Specify) _____</p>	<p>41 42</p> <p>43</p> <p>44</p> <p>48 50</p>	<p>53</p> <p>54</p> <p>55</p> <p>56</p> <p>57</p>
<p>15. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1. <input type="checkbox"/> LESS THAN 1 MONTH 2. <input type="checkbox"/> 1 TO 6 MONTHS 3. <input type="checkbox"/> 6 MONTHS TO 1 YEAR 4. <input type="checkbox"/> 1 TO 5 YEARS 5. <input type="checkbox"/> MORE THAN 5 YEARS</p> <p>16. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1. <input type="checkbox"/> EMPLOYED FULL TIME 3. <input type="checkbox"/> STUDENT 5. <input type="checkbox"/> RETIRED 2. <input type="checkbox"/> EMPLOYED PART TIME 4. <input type="checkbox"/> HOME MAKER 6. <input type="checkbox"/> UNEMPLOYED</p>	<p>51</p> <p>52</p>	<p>23. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>THANK YOU FOR YOUR COOPERATION</p>	

FIGURE B-7. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - MONTHLY PASS USERS (CONT)

TICKET SURVEY

Regional Transit Bus Rider Survey.
Please fill out and return to
the person distributing surveys.

THIS SURVEY FORM IS FOR PASSENGERS WHO PAID THEIR
FARES USING A TICKET. IF YOU PAID CASH ONLY,
BOUGHT OR USED A DAILY PASS, OR USED A MONTHLY
PASS, PLEASE RETURN THIS FORM TO THE SURVEY TAKER
AND REQUEST THE CORRECT FORM FOR YOU.

Survey Type 2
Surveyor _____
Line # _____
Time AM PM
Day _____

17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44

1. HOW DID YOU PAY FOR THIS TRIP?
1. TICKET(S) ONLY..... AMOUNT _____
2. TICKET AMOUNT _____ + CASH AMOUNT _____

2. WHERE DID YOU PURCHASE YOUR TICKETS?
1. THE RT PASSENGER SERVICE CENTER
2. THE RT MAIN OFFICE
3. OTHER _____ (Please specify)

3. WHERE ARE YOU COMING FROM...
1. HOME? 4. SHOPPING? 6. MEDICAL OR DENTAL AP-POINTMENTS?
2. WORK? 5. OTHER PERSONAL BUSINESS? 7. OTHER?

4. WHERE ARE YOU GOING TO...
1. HOME? 4. SHOPPING? 6. MEDICAL OR DENTAL AP-POINTMENTS?
2. WORK? 5. OTHER PERSONAL BUSINESS? 7. OTHER?

5. HOW MANY TIMES DO YOU EXPECT TO BOARD AN RT BUS TODAY? (INCLUDE TRANSFER AND TRIPS YOU HAVE ALREADY MADE TODAY.)
1. 1 TIME 4. 4 TIMES 6. 6 TIMES
2. 2 TIMES 5. 5 TIMES 7. 7 OR MORE TIMES
3. 3 TIMES

6. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK?
0. NONE 3. 3 DAYS 6. 6 DAYS
1. 1 DAY 4. 4 DAYS 7. 7 DAYS
2. 2 DAYS 5. 5 DAYS

7. HOW MANY DAYS LAST WEEK DID YOU PAY YOUR FARE USING...
1. DAILY PASS: _____ DAYS
2. TICKETS OR TOKENS: _____ DAYS
3. CASH: _____ DAYS

8. DID YOU KNOW RT OFFERED A DAILY PASS?
1. NO
2. YES, BUT I DIDN'T USE IT BECAUSE... (PLEASE CHECK ALL AP-PROPRIATE ANSWERS.)
1. I WON'T RIDE OFTEN ENOUGH TODAY TO ECONOMICALLY JUSTIFY BUYING A DAILY PASS
2. I AM AFRAID THAT I MAY LOSE IT
3. OTHER _____ (Please specify)

9. DID YOU KNOW THAT RT OFFERED A MONTHLY PASS?
1. NO
2. YES, BUT I DON'T USE IT BECAUSE... (PLEASE CHECK ALL AP-PROPRIATE ANSWERS.)
1. IT IS TOO LATE TO BUY A MONTHLY PASS FOR THIS MONTH. I WILL BUY ONE NEXT MONTH.
2. I DO NOT RIDE OFTEN ENOUGH TO ECONOMICALLY JUSTIFY BUYING A MONTHLY PASS
3. THE MONTHLY PASS REQUIRES TOO MUCH MONEY AT ONE TIME
4. I AM AFRAID THAT I MAY LOSE IT
5. OTHER _____ (Please specify)

10. WHAT MONTH DID YOU START USING TICKETS THIS YEAR? _____ (month)

11. PRIOR TO PURCHASING TICKETS, HOW DID YOU USUALLY PAY THE FARE?
1. CASH 4. TOKENS
2. DAILY PASS 5. DIDN'T USE RT BUS
3. MONTHLY PASS

12. HOW MANY TICKET BOOKS DO YOU BUY IN A TYPICAL MONTH?
1. \$3 BOOKS OF 20¢ TICKETS, _____ QUANTITY
2. \$3 BOOKS OF 25¢ TICKETS, _____ QUANTITY
3. \$6 BOOKS OF 50¢ TICKETS, _____ QUANTITY
4. \$6 BOOKS OF 60¢ TICKETS, _____ QUANTITY

Please continue to next column.

Please continue on to next page.

FIGURE B-8. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - TICKET USERS

continue

continue

<p>13. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>	43	<p>17. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1. <input type="checkbox"/> EMPLOYED FULL TIME 3. <input type="checkbox"/> STUDENT 5. <input type="checkbox"/> RETIRED</p> <p>2. <input type="checkbox"/> EMPLOYED PART TIME 4. <input type="checkbox"/> HOME MAKER 6. <input type="checkbox"/> UNEMPLOYED</p>	54
<p>14. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>	44	<p>18. DO YOU USUALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO</p> <p>19. YOUR SEX</p> <p>1. <input type="checkbox"/> MALE 2. <input type="checkbox"/> FEMALE</p>	55
<p>15. ABOUT TWO MONTHS AGO, ON JULY 1, RT RAISED MANY OF ITS FARES. A. THINK BACK A FEW MONTHS. HAS THE NUMBER OF WEEKLY RT BUS TRIPS YOU TAKE INCREASED, DECREASED OR STAYED THE SAME SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> INCREASED BY _____ ONE-WAY TRIPS PER WEEK</p> <p>2. <input type="checkbox"/> DECREASED BY _____ ONE-WAY TRIPS PER WEEK</p> <p>3. <input type="checkbox"/> STAYED THE SAME</p> <p>4. <input type="checkbox"/> I DIDN'T RIDE RT BUSES BEFORE JULY 1.</p> <p>B. DID YOU CHANGE THE WAY YOU PAY YOUR FARE SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> YES, PRIOR TO JULY 1, I PAID PRIMARILY BY:</p> <p>1. <input type="checkbox"/> CASH 4. <input type="checkbox"/> DAILY PASS</p> <p>2. <input type="checkbox"/> TOKEN OR TICKET 5. <input type="checkbox"/> MONTHLY PASS</p> <p>2. <input type="checkbox"/> NO</p>	45	<p>20. YOUR AGE</p> <p>1. <input type="checkbox"/> UNDER 18 3. <input type="checkbox"/> 25-34 5. <input type="checkbox"/> 45-61</p> <p>2. <input type="checkbox"/> 18-24 4. <input type="checkbox"/> 35-44 6. <input type="checkbox"/> 62 AND OVER</p> <p>21. YOUR TOTAL HOUSEHOLD INCOME</p> <p>1. <input type="checkbox"/> UNDER \$10,001 5. <input type="checkbox"/> \$25,001-\$30,000</p> <p>2. <input type="checkbox"/> \$10,001-\$15,000 6. <input type="checkbox"/> \$30,001-\$40,000</p> <p>3. <input type="checkbox"/> \$15,001-\$20,000 7. <input type="checkbox"/> \$40,001-\$50,000</p> <p>4. <input type="checkbox"/> \$20,001-\$25,000 8. <input type="checkbox"/> OVER \$50,000</p>	57
<p>C. IF YOU DID CHANGE YOUR BUS USE SINCE JULY 1, WHAT WERE THE MOST IMPORTANT REASONS FOR THESE CHANGES?</p> <p>_____</p> <p>_____</p> <p>_____</p>	46 47	<p>22. YOUR ETHNIC BACKGROUND</p> <p>1. <input type="checkbox"/> ASIAN 3. <input type="checkbox"/> MEXICAN OR HISPANIC 5. <input type="checkbox"/> WHITE</p> <p>2. <input type="checkbox"/> BLACK 4. <input type="checkbox"/> AMERICAN INDIAN 6. <input type="checkbox"/> OTHER</p> <p>(Specify)</p> <p>_____</p>	58
<p>16. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1. <input type="checkbox"/> LESS THAN 1 MONTH 4. <input type="checkbox"/> 1 to 5 YEARS</p> <p>2. <input type="checkbox"/> 1 to 6 MONTHS 5. <input type="checkbox"/> MORE THAN 5 YEARS</p> <p>3. <input type="checkbox"/> 6 MONTHS to 1 YEAR</p>	48	<p>24. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>THANK YOU FOR YOUR COOPERATION.</p>	59
	49		
	50 52		
	53		

FIGURE B-8. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - TICKET USERS (CONT)

Regional Transit Bus Rider Survey.
Please fill out and return to
the person distributing surveys.

DAILY PASS SURVEY
THIS SURVEY FORM IS FOR PASSENGERS WHO HAVE BOUGHT
A DAILY PASS TODAY. IF YOU PAID YOUR FARE IN ANY
OTHER WAY, PLEASE RETURN THIS FORM TO THE SURVEY
TAKER AND REQUEST THIS CORRECT FORM FOR YOU.

Survey Type 3
Surveyor _____
Line # _____
Time _____ AM _____ PM
Day _____

<p>1. WHAT DID YOU PAY FOR YOUR DAILY PASS TODAY? 1. <input type="checkbox"/> \$1.25 2. <input type="checkbox"/> \$1.75</p>	<p>9. DID YOU KNOW THAT RT OFFERED A MONTHLY PASS? 1. <input type="checkbox"/> NO</p>	<p>5 6 - 7 8 - 10 11 - 14 15 - 16</p>
<p>2. WHERE ARE YOU COMING FROM... 1. <input type="checkbox"/> HOME? 4. <input type="checkbox"/> SHOPPING? 6. <input type="checkbox"/> MEDICAL OR DENTAL APPOINTMENT? 2. <input type="checkbox"/> WORK? 5. <input type="checkbox"/> OTHER PERSONAL BUSINESS? 7. <input type="checkbox"/> OTHER?</p>	<p>2. <input type="checkbox"/> YES, BUT I DON'T USE IT BECAUSE... (PLEASE CHECK ALL APPROPRIATE ANSWERS.) 1. <input type="checkbox"/> IT IS TOO LATE TO BUY A MONTHLY PASS FOR THIS MONTH. I WILL BUY ONE NEXT MONTH 2. <input type="checkbox"/> I DO NOT RIDE OFTEN ENOUGH TO ECONOMICALLY JUSTIFY BUYING A MONTHLY PASS 3. <input type="checkbox"/> THE MONTHLY PASS REQUIRES TOO MUCH MONEY AT ONE TIME 4. <input type="checkbox"/> I AM AFRAID THAT I MAY LOSE IT 5. <input type="checkbox"/> OTHER _____ (Please specify)</p>	<p>20</p>
<p>3. WHERE ARE YOU GOING TO... 1. <input type="checkbox"/> HOME? 4. <input type="checkbox"/> SHOPPING? 6. <input type="checkbox"/> MEDICAL OR DENTAL APPOINTMENT? 2. <input type="checkbox"/> WORK? 5. <input type="checkbox"/> OTHER PERSONAL BUSINESS? 7. <input type="checkbox"/> OTHER?</p>	<p>9. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS.) 0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS 1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS 2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>	<p>29 33</p>
<p>4. HOW MANY TIMES DO YOU EXPECT TO BOARD AN RT BUS TODAY? (INCLUDE TRANSFERS AND TRIPS YOU HAVE ALREADY MADE TODAY.) 1. <input type="checkbox"/> 1 TIME 4. <input type="checkbox"/> 4 TIMES 6. <input type="checkbox"/> 6 TIMES 2. <input type="checkbox"/> 2 TIMES 5. <input type="checkbox"/> 5 TIMES 7. <input type="checkbox"/> 7 OR MORE TIMES 3. <input type="checkbox"/> 3 TIMES</p>	<p>10. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.) 0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS 1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS 2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>	<p>34</p>
<p>5. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK? 0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 3 DAYS 6. <input type="checkbox"/> 6 DAYS 1. <input type="checkbox"/> 1 DAY 4. <input type="checkbox"/> 4 DAYS 7. <input type="checkbox"/> 7 DAYS 2. <input type="checkbox"/> 2 DAYS 5. <input type="checkbox"/> 5 DAYS</p>	<p>11. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT? 1. <input type="checkbox"/> LESS THAN 1 MONTH 4. <input type="checkbox"/> 1 to 5 YEARS 2. <input type="checkbox"/> 1 to 6 MONTHS 5. <input type="checkbox"/> MORE THAN 5 YEARS 3. <input type="checkbox"/> 6 MONTHS to 1 YEAR</p>	<p>35</p>
<p>6. HOW MANY DAYS LAST WEEK DID YOU PAY YOUR FARE USING... 1. <input type="checkbox"/> DAILY PASS: _____ DAYS 2. <input type="checkbox"/> TICKETS OR TOKENS: _____ DAYS 3. <input type="checkbox"/> CASH: _____ DAYS</p>	<p>12. WHICH OF THE FOLLOWING DESCRIBES YOU BEST? 1. <input type="checkbox"/> EMPLOYED FULL TIME 3. <input type="checkbox"/> STUDENT 5. <input type="checkbox"/> RETIRED 2. <input type="checkbox"/> EMPLOYED PART TIME 4. <input type="checkbox"/> HOMEBAKER 6. <input type="checkbox"/> UNEMPLOYED</p>	<p>36</p>
<p>7. DID YOU KNOW THAT RT OFFERED TICKETS? 1. <input type="checkbox"/> NO</p>	<p>17. WHICH OF THE FOLLOWING DESCRIBES YOU BEST? 1. <input type="checkbox"/> EMPLOYED FULL TIME 3. <input type="checkbox"/> STUDENT 5. <input type="checkbox"/> RETIRED 2. <input type="checkbox"/> EMPLOYED PART TIME 4. <input type="checkbox"/> HOMEBAKER 6. <input type="checkbox"/> UNEMPLOYED</p>	<p>37</p>
<p>25 27</p>	<p>Please continue on to next page.</p>	
<p>Please continue to next column.</p>		

FIGURE B-9. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - DAILY PASS USERS

continue	38	<p>13. ABOUT TWO MONTHS AGO, ON JULY 1, RT RAISED MANY OF ITS FARES. THINK BACK A FEW MONTHS. HAS THE NUMBER OF WEEKLY RT BUS TRIPS YOU TAKE INCREASED, DECREASED OR STAYED THE SAME SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> INCREASED BY _____ ONE-WAY TRIPS PER WEEK 2. <input type="checkbox"/> DECREASED BY _____ ONE-WAY TRIPS PER WEEK 3. <input type="checkbox"/> STAYED THE SAME</p> <p>4. <input type="checkbox"/> I DIDN'T RIDE RT BUSES BEFORE JULY 1.</p> <p>B. DID YOU CHANGE THE WAY YOU PAY YOUR FARE SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> YES, PRIOR TO JULY 1, I PAID PRIMARILY BY: 1. <input type="checkbox"/> CASH 3. <input type="checkbox"/> DAILY PASS 2. <input type="checkbox"/> TOKEN OR TICKET 4. <input type="checkbox"/> MONTHLY PASS</p> <p>2. <input type="checkbox"/> NO</p> <p>C. IF YOU DID CHANGE YOUR BUS USE SINCE JULY 1, WHAT WERE THE MOST IMPORTANT REASONS FOR THESE CHANGES? _____ _____ _____</p>	50
continue	39 40	<p>18. YOUR ETHNIC BACKGROUND</p> <p>1. <input type="checkbox"/> ASIAN 4. <input type="checkbox"/> AMERICAN INDIAN 2. <input type="checkbox"/> BLACK 5. <input type="checkbox"/> WHITE 3. <input type="checkbox"/> MEXICAN OR HISPANIC 6. <input type="checkbox"/> OTHER (Please specify)</p>	
	41	<p>20. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT? _____ _____ _____</p>	
	42		
	43 45		
	46	<p>14. DO YOU USUALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO</p>	50
	47	<p>15. YOUR SEX</p> <p>1. <input type="checkbox"/> MALE 2. <input type="checkbox"/> FEMALE</p>	
	48	<p>16. YOUR AGE</p> <p>1. <input type="checkbox"/> UNDER 18 3. <input type="checkbox"/> 25-34 6. <input type="checkbox"/> 45-61 2. <input type="checkbox"/> 18-24 4. <input type="checkbox"/> 35-44 7. <input type="checkbox"/> 62 and OVER</p>	
	49	<p>17. YOUR TOTAL HOUSEHOLD INCOME</p> <p>1. <input type="checkbox"/> UNDER \$10,001 5. <input type="checkbox"/> \$25,001-\$30,000 2. <input type="checkbox"/> \$10,001-\$15,000 6. <input type="checkbox"/> \$30,001-\$40,000 3. <input type="checkbox"/> \$15,001-\$20,000 7. <input type="checkbox"/> \$40,001-\$50,000 4. <input type="checkbox"/> \$20,001-\$25,000 8. <input type="checkbox"/> OVER \$50,000</p>	
		THANK YOU FOR YOUR COOPERATION!	

FIGURE B-9. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - DAILY PASS USERS (CONT)

Regional Transit Bus Rider Survey.
Please fill out and return to
the person distributing surveys.

CASH SURVEY

THIS SURVEY FORM IS FOR PASSENGERS WHO PAID
A SINGLE CASH FARE. IF YOU USED A TICKET OR
TOKEN, BOUGHT OR USED A DAILY PASS, OR USED A
MONTHLY PASS, PLEASE RETURN THIS FORM TO THE
SURVEY TAKER AND REQUEST THE CORRECT FORM FOR YOU.

Survey Type 4
Surveyor _____
Line # _____
Time AM _____ PM
Day 11 - 14
15 - 16

<p>1. WHAT FARE DID YOU JUST NOW PAY?</p> <p>1. <input type="checkbox"/> 25¢ 4. <input type="checkbox"/> 60¢ 6. <input type="checkbox"/> \$1.10 2. <input type="checkbox"/> 35¢ 5. <input type="checkbox"/> \$1.00 7. <input type="checkbox"/> Other 3. <input type="checkbox"/> 50¢</p> <p>(Please specify)</p>	<p>28</p>
<p>2. WHERE ARE YOU COMING FROM...</p> <p>1. <input type="checkbox"/> HOME? 4. <input type="checkbox"/> SHOPPING? 6. <input type="checkbox"/> MEDICAL OR DENTAL AP-POINTMENTS? 2. <input type="checkbox"/> WORK? 5. <input type="checkbox"/> OTHER PERSONAL BUSINESS? 7. <input type="checkbox"/> OTHER? 3. <input type="checkbox"/> SCHOOL?</p>	<p>29 31</p>
<p>3. WHERE ARE YOU GOING TO...</p> <p>1. <input type="checkbox"/> HOME? 4. <input type="checkbox"/> SHOPPING? 6. <input type="checkbox"/> MEDICAL OR DENTAL AP-POINTMENTS? 2. <input type="checkbox"/> WORK? 5. <input type="checkbox"/> OTHER PERSONAL BUSINESS? 7. <input type="checkbox"/> OTHER? 3. <input type="checkbox"/> SCHOOL?</p>	<p>32</p>
<p>4. HOW MANY TIMES DO YOU EXPECT TO BOARD AN RT BUS TODAY? (INCLUDE TRANSFERS AND TRIPS YOU HAVE ALREADY MADE TODAY.)</p> <p>1. <input type="checkbox"/> 1 TIME 4. <input type="checkbox"/> 4 TIMES 6. <input type="checkbox"/> 6 TIMES 2. <input type="checkbox"/> 2 TIMES 5. <input type="checkbox"/> 5 TIMES 7. <input type="checkbox"/> 7 TIMES OR MORE TIMES 3. <input type="checkbox"/> 3 TIMES</p>	<p>33 37</p>
<p>5. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK?</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 3 DAYS 6. <input type="checkbox"/> 6 DAYS 1. <input type="checkbox"/> 1 DAY 4. <input type="checkbox"/> 4 DAYS 7. <input type="checkbox"/> 7 DAYS 2. <input type="checkbox"/> 2 DAYS 5. <input type="checkbox"/> 5 DAYS</p>	<p>38</p>
<p>6. HOW MANY DAYS LAST WEEK DID YOU PAY YOUR FARE USING...</p> <p>1. <input type="checkbox"/> DAILY PASS: _____ DAYS 3. <input type="checkbox"/> CASH: _____ DAYS 2. <input type="checkbox"/> TICKETS OR TOKENS: _____ DAYS</p>	<p>39</p>
<p>7. DID YOU KNOW THAT RT OFFERED A DAILY PASS?</p> <p>1. <input type="checkbox"/> NO</p> <p>2. <input type="checkbox"/> YES, BUT I DIDN'T USE IT BECAUSE...(PLEASE CHECK ALL AP-PROPRIATE ANSWERS.)</p> <p>1. <input type="checkbox"/> I WON'T RIDE OFTEN ENOUGH TODAY TO ECONOMICALLY JUSTIFY BUYING A DAILY PASS 2. <input type="checkbox"/> I AM AFRAID THAT I MAY LOSE IT 3. <input type="checkbox"/> OTHER _____ (Please specify)</p>	<p>39</p>

Please continue on to next page.

Please continue to next column.

FIGURE B-10. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - CASH USERS

<p style="text-align: center;">continue</p> <p>12. ABOUT TWO MONTHS AGO, ON JULY 1, RT RAISED MANY OF ITS FARES. THINK BACK A FEW MONTHS. HAS THE NUMBER OF WEEKLY RT BUS TRIPS YOU TAKE INCREASED, DECREASED OR STAYED THE SAME SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> INCREASED BY ONE-WAY TRIPS PER WEEK 2. <input type="checkbox"/> DECREASED BY ONE-WAY TRIPS PER WEEK 3. <input type="checkbox"/> STAYED THE SAME 4. <input type="checkbox"/> I DIDN'T RIDE RT BUSES BEFORE JULY 1</p> <p>B. DID YOU CHANGE THE WAY YOU PAY YOUR FARE SINCE BEFORE JULY 1?</p> <p>1. <input type="checkbox"/> YES, PRIOR TO JULY 1, I PAID PRIMARILY BY: 1. <input type="checkbox"/> CASH 4. <input type="checkbox"/> DAILY PASS 2. <input type="checkbox"/> TOKEN OR TICKET 5. <input type="checkbox"/> MONTHLY PASS</p> <p>2. <input type="checkbox"/> NO</p> <p>C. IF YOU DID CHANGE YOUR BUS USE SINCE JULY 1, WHAT WERE THE MOST IMPORTANT REASONS FOR THESE CHANGES?</p> <p>_____</p> <p>_____</p>	40 41 42 43 44 45 47 48 49 50 51	<p style="text-align: center;">continue</p> <p>17. YOUR AGE</p> <p>1. <input type="checkbox"/> UNDER 18 3. <input type="checkbox"/> 25-34 5. <input type="checkbox"/> 45-61 2. <input type="checkbox"/> 18-24 4. <input type="checkbox"/> 35-44 6. <input type="checkbox"/> 62 AND OVER</p> <p>18. YOUR TOTAL HOUSEHOLD INCOME</p> <p>1. <input type="checkbox"/> UNDER \$10,001 4. <input type="checkbox"/> \$20,001-\$25,000 7. <input type="checkbox"/> \$40,001-\$50,000 2. <input type="checkbox"/> \$10,001-\$15,000 5. <input type="checkbox"/> \$25,001-\$30,000 8. <input type="checkbox"/> OVER \$50,000 3. <input type="checkbox"/> \$15,001-\$20,000 6. <input type="checkbox"/> \$30,001-\$40,000</p> <p>19. YOUR ETHNIC BACKGROUND</p> <p>1. <input type="checkbox"/> ASIAN 3. <input type="checkbox"/> MEXICAN OR HISPANIC 5. <input type="checkbox"/> WHITE 2. <input type="checkbox"/> BLACK 4. <input type="checkbox"/> AMERICAN INDIAN 6. <input type="checkbox"/> OTHER (Please specify)</p>	52 51 54
<p>13. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1. <input type="checkbox"/> LESS THAN 1 MONTH 4. <input type="checkbox"/> 1 to 5 YEARS 2. <input type="checkbox"/> 1 to 6 MONTHS 5. <input type="checkbox"/> MORE THAN 5 YEARS 3. <input type="checkbox"/> 6 MONTHS TO 1 YEAR</p> <p>14. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1. <input type="checkbox"/> EMPLOYED FULL TIME 3. <input type="checkbox"/> STUDENT 5. <input type="checkbox"/> RETIRED 2. <input type="checkbox"/> EMPLOYED PART TIME 4. <input type="checkbox"/> HOME/MAKER 6. <input type="checkbox"/> UNEMPLOYED</p> <p>15. DO YOU USUALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO</p> <p>16. YOUR SEX</p> <p>1. <input type="checkbox"/> MALE 2. <input type="checkbox"/> FEMALE</p>		<p>21. ARE THERE ANY COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p style="text-align: center;">THANK YOU FOR YOUR COOPERATION!</p>	

FIGURE B-10. PRE-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - CASH USERS (CONT)

B.2.2 Mail Order Interim Survey

An interim survey of mail order customers was conducted beginning December 1981, two months after the service began. The purpose of the survey was to measure the characteristics, perceptions of service, and former method of fare payment and TFP purchase of mail order customers. Separate questionnaires were developed for pass and ticket purchasers (see Figures B-11 and B-12).

The sample consisted of the list of mail order customers kept by RT. Customers were sent survey questionnaires with stamped return envelopes and were sent a \$1.00 coupon, good toward purchase of a monthly pass or a book of tickets, if they returned a completed questionnaire. A reminder notice was sent out two weeks later to persons who had not yet responded. There were 304 questionnaires returned: 244 pass buyers and 60 ticket buyers.

As part of this survey, a separate questionnaire (Figure B-13) was designed for persons who had inquired about mail order service but had decided not to use it.

Before RT began mail order service, 1,460 inquiries were received in the form of coupons or messages left with RT's answering service. Questionnaires were sent to all of these persons. Persons who returned completed questionnaires were given \$1.00 coupons for pass or ticket purchases. A total of 612 questionnaires was returned.

B.2.3 Telephone Order Interim Survey

Telephone order customers were surveyed beginning February 1982, two months after the service began. The survey was conducted like the survey of mail order users (see Section B.2.2 above). The questionnaires for the survey are shown in Figures B-14 and B-15. There were 102 questionnaires returned: 78 pass buyers and 24 ticket buyers.

B.2.4 Post-Implementation On-Board Survey

A post-implementation survey of RT passengers was conducted in May 1983 to measure characteristics of RT passengers by method of fare payment. The survey was conducted like the pre-implementation on-board survey, as described in Section B.2.1 above. Questionnaires for the survey are shown in Figures B-16 through B-19.

MONTHLY PASS/STAMP MAIL ORDER

THIS SURVEY FORM IS FOR PASSENGERS WHO PURCHASED A MONTHLY OR STAMP THROUGH THE MAIL. PLEASE FILL OUT THE COUPON AT THE END, WHICH WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS/STAMP OR A TICKET BOOK.

Survey Type 1
Date Sent 6 - 11
Date Received 12 - 17

ALL INFORMATION WILL BE KEPT CONFIDENTIAL.

<p>1. HOW MUCH DID YOUR MONTHLY PASS/STAMP COST, INCLUDING ANY ZONE STAMPS?</p> <p>1 <input type="checkbox"/> \$8.00 3 <input type="checkbox"/> \$24.00 2 <input type="checkbox"/> \$12.00 4 <input type="checkbox"/> \$34.00</p>	<p>4. WHY DO YOU PURCHASE YOUR MONTHLY PASS/STAMP THROUGH THE MAIL? (PLEASE CHECK ALL APPROPRIATE ANSWERS.)</p> <p>1 <input type="checkbox"/> IT IS MORE CONVENIENT 2 <input type="checkbox"/> I CANNOT TRAVEL TO A SALES OUTLET 3 <input type="checkbox"/> OTHER _____ (Please specify)</p>	<p>26</p>	<p>30</p>
<p>2. FOR WHICH MONTHS HAVE YOU ORDERED A MONTHLY PASS/STAMP THROUGH THE MAIL? (PLEASE CHECK APPROPRIATE ANSWERS.)</p> <p>1 <input type="checkbox"/> NOVEMBER 4 <input type="checkbox"/> FEBRUARY 2 <input type="checkbox"/> DECEMBER 3 <input type="checkbox"/> JANUARY</p>	<p>5. WOULD YOU PREFER TO SEE ANY CHANGES MADE TO THE CURRENT MAIL ORDER SERVICE?</p> <p>_____</p>	<p>31</p>	<p>34</p>
<p>3. WHERE DID YOU PURCHASE YOUR MONTHLY PASS/STAMP BEFORE MAIL ORDER PURCHASE WAS AVAILABLE?</p> <p>1 <input type="checkbox"/> RT OFFICE 2 <input type="checkbox"/> OTHER _____ (Please specify)</p> <p>3 <input type="checkbox"/> I DIDN'T PURCHASE A MONTHLY PASS/STAMP BEFORE. HOW DID YOU PAY YOUR FARE ON RT BEFORE?</p> <p>1 <input type="checkbox"/> TICKETS 2 <input type="checkbox"/> CASH 3 <input type="checkbox"/> DIDN'T RIDE RT BUSES</p>	<p>6. WHEN DID YOU BUY A PASS FOR THE FIRST TIME? (REGARDLESS OF HOW YOU BOUGHT IT.)</p> <p>_____ Month _____ Year</p>	<p>35</p>	<p>38</p>
<p>44</p>	<p>7. WHY DO YOU PURCHASE A MONTHLY PASS/STAMP? (PLEASE CHECK ALL APPROPRIATE ANSWERS.)</p> <p>1 <input type="checkbox"/> IT IS CHEAPER THAN THE REGULAR FARE OR A DAILY PASS 2 <input type="checkbox"/> IT IS MORE CONVENIENT THAN CARRYING CHANGE OR TICKETS 3 <input type="checkbox"/> OTHER _____ (Please specify)</p>	<p>39</p>	<p>43</p>
<p>45</p>	<p>8. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK?</p> <p>0 <input type="checkbox"/> NONE 2 <input type="checkbox"/> 2 DAYS 4 <input type="checkbox"/> 4 DAYS 6 <input type="checkbox"/> 6 DAYS 1 <input type="checkbox"/> 1 DAY 3 <input type="checkbox"/> 3 DAYS 5 <input type="checkbox"/> 5 DAYS 7 <input type="checkbox"/> 7 DAYS</p>	<p>44</p>	<p>44</p>
<p>45</p>	<p>9. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS.)</p> <p>0 <input type="checkbox"/> NONE 3 <input type="checkbox"/> 5 OR 6 TRIPS 6 <input type="checkbox"/> 11 OR 12 TRIPS 1 <input type="checkbox"/> 1 OR 2 TRIPS 4 <input type="checkbox"/> 7 OR 8 TRIPS 7 <input type="checkbox"/> MORE THAN 12 TRIPS 2 <input type="checkbox"/> 3 OR 4 TRIPS 5 <input type="checkbox"/> 9 OR 10 TRIPS</p>	<p>45</p>	<p>45</p>

Please continue on to next page.

FIGURE B-11. INTERIM MAIL ORDER SURVEY QUESTIONNAIRE - MONTHLY PASS BUYERS

continue	<p>10. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.)</p> <p>0 <input type="checkbox"/> NONE <input type="checkbox"/> 5 OR 6 TRIPS <input type="checkbox"/> 11 OR 12 TRIPS</p> <p>1 <input type="checkbox"/> 1 OR 2 TRIPS <input type="checkbox"/> 7 OR 8 TRIPS <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2 <input type="checkbox"/> 3 OR 4 TRIPS <input type="checkbox"/> 9 OR 10 TRIPS</p>	46	
continue	<p>11. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1 <input type="checkbox"/> LESS THAN 1 MONTH</p> <p>2 <input type="checkbox"/> 1 TO 6 MONTHS</p> <p>3 <input type="checkbox"/> 6 MONTHS TO 1 YEAR</p> <p>4 <input type="checkbox"/> 1 TO 5 YEARS</p> <p>5 <input type="checkbox"/> MORE THAN 5 YEARS</p>	47	52
	<p>12. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1 <input type="checkbox"/> EMPLOYED FULL TIME 4 <input type="checkbox"/> HOMEMAKER</p> <p>2 <input type="checkbox"/> EMPLOYED PART TIME 5 <input type="checkbox"/> RETIRED</p> <p>3 <input type="checkbox"/> STUDENT 6 <input type="checkbox"/> UNEMPLOYED</p>	48	
	<p>13. DO YOU USUALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1 <input type="checkbox"/> YES</p> <p>2 <input type="checkbox"/> NO</p>	49	
	<p>14. YOUR SEX</p> <p>1 <input type="checkbox"/> MALE</p> <p>2 <input type="checkbox"/> FEMALE</p>	50	
	<p>15. WHAT IS YOUR AGE?</p> <p>1 <input type="checkbox"/> UNDER 18 3 <input type="checkbox"/> 25-34 5 <input type="checkbox"/> 45-61</p> <p>2 <input type="checkbox"/> 18-24 4 <input type="checkbox"/> 35-44 6 <input type="checkbox"/> 62 AND OVER</p>	51	
continue	<p>16. WHAT IS THE APPROXIMATE RANGE OF YOUR TOTAL HOUSEHOLD INCOME?</p> <p>1 <input type="checkbox"/> UNDER \$10,001 4 <input type="checkbox"/> \$20,001-\$25,000 6 <input type="checkbox"/> \$40,001-\$50,000</p> <p>2 <input type="checkbox"/> \$10,001-\$15,000 5 <input type="checkbox"/> \$25,001-\$30,000 7 <input type="checkbox"/> OVER \$50,000</p> <p>3 <input type="checkbox"/> \$15,001-\$20,000</p>		52
	<p>17. WHAT IS YOUR ETHNIC BACKGROUND?</p> <p>1 <input type="checkbox"/> ASIAN 3 <input type="checkbox"/> MEXICAN OR HISPANIC 5 <input type="checkbox"/> WHITE</p> <p>2 <input type="checkbox"/> BLACK 4 <input type="checkbox"/> AMERICAN INDIAN 6 <input type="checkbox"/> OTHER</p> <p>(Please specify)</p> <p>ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p>		53

THE COUPON BELOW WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS/STAMP OR A TICKET BOOK WHEN VALIDATED BY RT. DO NOT REMOVE THE COUPON. FILL IT OUT AND RETURN IT WITH THE FORM. RT WILL VALIDATE THE COUPON AND RETURN IT TO YOU.

THIS COUPON CAN BE REDEEMED ONLY THROUGH THE MAIL OR AT RT OFFICES.

FARE PREPAYMENT COUPON	
GOOD FOR ONLY \$1.00 OFF ON NEXT PURCHASE	
Name _____	Validate _____
Street _____	City _____, CA
	ZIP _____
This coupon can be used only for purchases through the mail or at RT offices.	

FIGURE B-11. INTERIM MAIL ORDER SURVEY QUESTIONNAIRE - MONTHLY PASS BUYERS (CONT)

TICKET MAIL ORDER SURVEY

This survey form is for passengers who purchased tickets through the mail. Please fill out the coupon at the end, which will be worth \$1.00 toward your next purchase of a monthly pass, stamp or ticket book.

ALL INFORMATION WILL BE KEPT CONFIDENTIAL.

Survey Type 2

Date Sent _____

Date Received _____

5

6 - 11

12 - 17

<p>1. HOW MANY TICKET BOOKS DID YOU BUY WITH YOUR LAST MAIL ORDER?</p> <p>1 <input type="checkbox"/> \$3 BOOKS OF 25¢ TICKETS (quantity) _____</p> <p>2 <input type="checkbox"/> \$6 BOOKS OF 50¢ TICKETS (quantity) _____</p> <p>3 <input type="checkbox"/> \$6 BOOKS OF 60¢ TICKETS (quantity) _____</p>	<p>18 20</p> <p>21 23</p> <p>24 26</p> <p>27 30</p>	<p>4. WHERE DID YOU PURCHASE TICKETS BEFORE MAIL ORDER PURCHASE WAS AVAILABLE?</p> <p>1 <input type="checkbox"/> RT OFFICES</p> <p>2 <input type="checkbox"/> OTHER _____ (Please specify)</p> <p>3 <input type="checkbox"/> I DIDN'T PURCHASE TICKETS BEFORE.</p> <p>HOW DID YOU USUALLY PAY YOUR FARE ON RT BEFORE?</p> <p>1 <input type="checkbox"/> CASH</p> <p>2 <input type="checkbox"/> DAILY PASS</p> <p>3 <input type="checkbox"/> MONTHLY PASS</p> <p>4 <input type="checkbox"/> I DIDN'T USE RT BUSES</p>	<p>36</p> <p>37 39</p>
<p>2. WHICH MONTHS HAVE YOU ORDERED TICKETS THROUGH THE MAIL? (PLEASE CHECK ALL APPROPRIATE ANSWERS.)</p> <p>1 <input type="checkbox"/> OCTOBER</p> <p>2 <input type="checkbox"/> NOVEMBER</p> <p>3 <input type="checkbox"/> DECEMBER</p> <p>4 <input type="checkbox"/> JANUARY</p>		<p>5. WOULD YOU PREFER TO SEE ANY CHANGES MADE TO THE CURRENT MAIL ORDER SERVICE? (Please specify)</p> <p>_____</p> <p>_____</p>	<p>40 43</p>
<p>3. WHY DO YOU PURCHASE YOUR TICKETS THROUGH THE MAIL? (PLEASE CHECK ALL APPROPRIATE ANSWERS.)</p> <p>1 <input type="checkbox"/> IT IS MORE CONVENIENT</p> <p>2 <input type="checkbox"/> I CANNOT TRAVEL TO A SALES OUTLET</p> <p>3 <input type="checkbox"/> OTHER _____ (Please specify)</p>	<p>31 35</p>	<p>6. HOW MANY DAYS LAST WEEK DID YOU PAY FARE USING:</p> <p>1 <input type="checkbox"/> DAILY PASS: _____ DAYS</p> <p>2 <input type="checkbox"/> TICKETS: _____ DAYS</p> <p>3 <input type="checkbox"/> CASH: _____ DAYS</p>	<p>44 45</p> <p>46 47</p> <p>48 49</p>
<p>PLEASE CONTINUE TO NEXT PAGE.</p>		<p>7. WHAT MONTH DID YOU START USING TICKETS THIS YEAR? _____ (month)</p>	<p>50 51</p>
<p>PLEASE CONTINUE TO NEXT PAGE.</p>		<p>8. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK?</p> <p>0 <input type="checkbox"/> NONE 2 <input type="checkbox"/> 2 DAYS 4 <input type="checkbox"/> 4 DAYS 6 <input type="checkbox"/> 6 DAYS</p> <p>1 <input type="checkbox"/> 1 DAY 3 <input type="checkbox"/> 3 DAYS 5 <input type="checkbox"/> 5 DAYS 7 <input type="checkbox"/> 7 DAYS</p>	<p>52</p>
<p>PLEASE CONTINUE TO NEXT PAGE.</p>		<p>9. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS)</p> <p>0 <input type="checkbox"/> NONE 3 <input type="checkbox"/> 5 OR 6 TRIPS 6 <input type="checkbox"/> 11 OR 12 TRIPS</p> <p>1 <input type="checkbox"/> 1 OR 2 TRIPS 4 <input type="checkbox"/> 7 OR 8 TRIPS 7 <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2 <input type="checkbox"/> 3 OR 4 TRIPS 5 <input type="checkbox"/> 9 OR 10 TRIPS</p>	<p>53</p>

FIGURE B-12. INTERIM MAIL ORDER SURVEY QUESTIONNAIRE - TICKET BUYERS

CONTINUE	54	<p>10. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.)</p> <p>0 <input type="checkbox"/> NONE 3 <input type="checkbox"/> 5 OR 6 TRIPS 6 <input type="checkbox"/> 11 OR 12 TRIPS 1 <input type="checkbox"/> 1 OR 2 TRIPS 4 <input type="checkbox"/> 7 OR 8 TRIPS 7 <input type="checkbox"/> MORE THAN 12 TRIPS 2 <input type="checkbox"/> 3 OR 4 TRIPS 5 <input type="checkbox"/> 9 OR 10 TRIPS</p>	61												
CONTINUE	55	<p>11. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1 <input type="checkbox"/> LESS THAN 1 MONTH 2 <input type="checkbox"/> 1 TO 6 MONTHS 3 <input type="checkbox"/> 6 MONTHS TO 1 YEAR 4 <input type="checkbox"/> 1 TO 5 YEARS 5 <input type="checkbox"/> MORE THAN 5 YEARS</p>													
CONTINUE	56	<p>12. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1 <input type="checkbox"/> EMPLOYED FULL TIME 3 <input type="checkbox"/> STUDENT 5 <input type="checkbox"/> RETIRED 2 <input type="checkbox"/> EMPLOYED PART TIME 4 <input type="checkbox"/> HOMEMAKER 6 <input type="checkbox"/> UNEMPLOYED</p>													
CONTINUE	57	<p>13. DO YOU USUALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO</p>													
CONTINUE	58	<p>14. YOUR SEX</p> <p>1 <input type="checkbox"/> MALE 2 <input type="checkbox"/> FEMALE</p>													
CONTINUE	59	<p>15. WHAT IS YOUR AGE?</p> <p>1 <input type="checkbox"/> UNDER 18 <input type="checkbox"/> 25-34 <input type="checkbox"/> 45-61 2 <input type="checkbox"/> 18-24 <input type="checkbox"/> 35-44 <input type="checkbox"/> 62 AND OVER</p>													
CONTINUE	60	<p>16. WHAT IS THE APPROXIMATE RANGE OF YOUR TOTAL HOUSEHOLD INCOME?</p> <p>1 <input type="checkbox"/> UNDER \$10,001 4 <input type="checkbox"/> \$20,001-\$25,000 7 <input type="checkbox"/> \$40,001-\$50,000 2 <input type="checkbox"/> \$10,001-\$15,000 5 <input type="checkbox"/> \$25,001-\$30,000 8 <input type="checkbox"/> OVER \$50,000 3 <input type="checkbox"/> \$15,001-\$20,000 6 <input type="checkbox"/> \$30,001-\$40,000</p>													
CONTINUE		<p>17. WHAT IS YOUR ETHNIC BACKGROUND?</p> <p>1 <input type="checkbox"/> ASIAN 3 <input type="checkbox"/> MEXICAN OR HISPANIC 5 <input type="checkbox"/> WHITE 2 <input type="checkbox"/> BLACK 4 <input type="checkbox"/> AMERICAN INDIAN 6 <input type="checkbox"/> OTHER _____ (Please specify)</p>													
CONTINUE		<p>18. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p>													
CONTINUE		<p>THE COUPON BELOW WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS/STAMP OR A TICKET BOOK WHEN VALIDATED BY RT. DO NOT REMOVE THE COUPON. FILL IT OUT AND RETURN IT WITH THE FORM. RT WILL VALIDATE THE COUPON AND RETURN IT TO YOU.</p> <p>THIS COUPON CAN BE REDEEMED ONLY THROUGH THE MAIL OR AT RT OFFICES.</p>													
CONTINUE		<table border="1"> <tr> <td colspan="2">FARE PREPAYMENT COUPON</td> <td>Validate</td> </tr> <tr> <td colspan="3">GOOD FOR \$1.00 OFF ON NEXT PURCHASE</td> </tr> <tr> <td>Name _____</td> <td>City _____</td> <td>CA _____</td> </tr> <tr> <td>Street _____</td> <td>ZIP _____</td> <td></td> </tr> </table> <p>This coupon can be used only for purchases through the mail or at RT offices.</p>	FARE PREPAYMENT COUPON		Validate	GOOD FOR \$1.00 OFF ON NEXT PURCHASE			Name _____	City _____	CA _____	Street _____	ZIP _____		
FARE PREPAYMENT COUPON		Validate													
GOOD FOR \$1.00 OFF ON NEXT PURCHASE															
Name _____	City _____	CA _____													
Street _____	ZIP _____														

	Survey Type <u> 3 </u>	5
	Date Sent _____	6 - 11
	Date Received _____	12 - 17
MAIL ORDER INQUIRY SURVEY		
1. HOW DO YOU USUALLY PAY YOUR FARE ON RT? .		18
1 <input type="checkbox"/> CASH 3 <input type="checkbox"/> DON'T RIDE RT BUSES 5 <input type="checkbox"/> MONTHLY PASS/STAMP		
2 <input type="checkbox"/> TICKETS 4 <input type="checkbox"/> DAILY PASS		
2. IF YOU NOW USE A MONTHLY PASS/STAMP OR TICKETS, WHERE DO YOU BUY THEM?		19
1 <input type="checkbox"/> RT OFFICES 2 <input type="checkbox"/> OTHER _____	(Please specify)	
3. WHY DON'T YOU USE RT'S MAIL ORDER SERVICE? Please specify.		20 23

4. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?		

FIGURE B-13. MAIL ORDER INQUIRY SURVEY

MONTHLY PASS/STAMP SURVEY
TELEPHONE ORDER SURVEY

THIS SURVEY FORM IS FOR PASSENGERS WHO PURCHASED A MONTHLY PASS OR STAMP BY TELEPHONE. PLEASE FILL OUT THE COUPON AT THE END, WHICH WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS/STAMP OR A TICKET BOOK.

Survey Type 1 5
Date Sent 6-11
Date Received 12-17

ALL INFORMATION WILL BE KEPT CONFIDENTIAL

1. HOW MUCH DID YOUR MONTHLY PASS/STAMP COST, INCLUDING ANY ZONE STAMPS? 18

1. \$8.00 3. \$24.00
2. \$12.00 4. \$34.00

2. FOR WHICH MONTHS HAVE YOU ORDERED A MONTHLY PASS/STAMP BY TELEPHONE? 19 22

1. FEBRUARY 3. APRIL
2. MARCH 4. MAY

3. HOW DID YOU PURCHASE YOUR MONTHLY PASS/STAMP BEFORE TELEPHONE ORDER PURCHASE WAS AVAILABLE? 23

1. RT OFFICE
2. BY MAIL
3. OTHER (Please specify) _____
4. I DIDN'T PURCHASE A MONTHLY PASS/STAMP BEFORE. 24 25

HOW DID YOU PAY YOUR FARE ON RT BEFORE?

1. DAILY PASS
 2. TICKETS
 3. CASH
 4. DIDN'T RIDE RT BUSES

4. WHY DID YOU PURCHASE YOUR MONTHLY PASS/STAMP BY TELEPHONE? (PLEASE CHECK ALL APPROPRIATE ANSWERS.) 24 30

1. IT IS MORE CONVENIENT
2. I CANNOT TRAVEL TO A SALES OUTLET
3. OTHER (Please specify) _____

5. WOULD YOU PREFER TO SEE ANY CHANGES MADE TO THE CURRENT TELEPHONE ORDER SERVICE? (PLEASE SPECIFY) 31 34

6. WHEN DID YOU BUY A MONTHLY PASS/STAMP FOR THE FIRST TIME? (REGARD- LESS OF HOW YOU BOUGHT IT). 35 38

_____ Month _____ Year

7. WHY DO YOU PURCHASE A MONTHLY PASS/STAMP? (PLEASE CHECK ALL APPROPRIATE ANSWERS.) 39 43

1. IT IS CHEAPER THAN THE REGULAR FARE OR A DAILY PASS
2. IT IS MORE CONVENIENT THAN CARRYING CHANGE OR TICKETS
3. OTHER (Please specify) _____

8. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK? 44

0. NONE 3. 3 DAYS 6. 6 DAYS
1. 1 DAY 4. 4 DAYS 7. 7 DAYS
2. 2 DAYS 5. 5 DAYS

Please continue onto next page

<p>9. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>	<p>16. WHAT IS THE APPROXIMATE RANGE OF YOUR TOTAL HOUSEHOLD INCOME?</p> <p>1. <input type="checkbox"/> UNDER \$10,001 5. <input type="checkbox"/> \$25,001-\$30,000</p> <p>2. <input type="checkbox"/> \$10,001-\$15,000 6. <input type="checkbox"/> \$30,001-\$40,000</p> <p>3. <input type="checkbox"/> \$15,001-\$20,000 7. <input type="checkbox"/> \$40,001-\$50,000</p> <p>4. <input type="checkbox"/> \$20,001-\$25,000 8. <input type="checkbox"/> OVER \$50,000</p>
<p>10. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>	<p>17. WHAT IS YOUR ETHNIC BACKGROUND?</p> <p>1. <input type="checkbox"/> ASIAN 3. <input type="checkbox"/> MEXICAN OR HISPANIC 5. <input type="checkbox"/> WHITE</p> <p>2. <input type="checkbox"/> BLACK 4. <input type="checkbox"/> AMERICAN INDIAN 6. <input type="checkbox"/> OTHER</p> <p>(Please specify)</p>
<p>11. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1. <input type="checkbox"/> LESS THAN 1 MONTH 4. <input type="checkbox"/> 1 to 5 YEARS</p> <p>2. <input type="checkbox"/> 1 to 6 MONTHS 5. <input type="checkbox"/> MORE THAN 5 YEARS</p> <p>3. <input type="checkbox"/> 6 MONTHS to 1 YEAR</p>	<p>18. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>12. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1. <input type="checkbox"/> EMPLOYED FULL TIME 4. <input type="checkbox"/> HOMEMAKER</p> <p>2. <input type="checkbox"/> EMPLOYED PART TIME 5. <input type="checkbox"/> RETIRED</p> <p>3. <input type="checkbox"/> STUDENT 6. <input type="checkbox"/> UNEMPLOYED</p>	<p>THE COUPON BELOW WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS/STAMP OR A TICKET BOOK WHEN VALIDATED BY RT. DO NOT REMOVE THE COUPON. FILL IT OUT AND RETURN IT WITH THE FORM. RT WILL VALIDATE THE COUPON AND CREDIT IT TO YOUR NEXT TELEPHONE ORDER.</p> <p>THIS COUPON CAN BE REDEEMED ONLY ON ORDERS BY TELEPHONE.</p>
<p>13. DO YOU GENERALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1. <input type="checkbox"/> YES</p> <p>2. <input type="checkbox"/> NO</p>	<p>19. FARE PREPAYMENT COUPON GOOD FOR \$1.00 OFF ON NEXT PURCHASE</p> <p>Name _____ Validate _____</p> <p>Street _____</p> <p>City _____, CA</p> <p>ZIP _____</p> <p>This coupon can be used only for purchases by telephone order.</p>
<p>14. YOUR SEX</p> <p>1. <input type="checkbox"/> MALE</p> <p>2. <input type="checkbox"/> FEMALE</p>	<p>20. HOW MANY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 or 6 TRIPS 6. <input type="checkbox"/> 11 or 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 or 2 TRIPS 4. <input type="checkbox"/> 7 or 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 or 4 TRIPS 5. <input type="checkbox"/> 9 or 10 TRIPS</p>
<p>15. WHAT IS YOUR AGE?</p> <p>1. <input type="checkbox"/> UNDER 18 3. <input type="checkbox"/> 25 - 34 5. <input type="checkbox"/> 45 - 61</p> <p>2. <input type="checkbox"/> 18 - 24 4. <input type="checkbox"/> 35 - 44 6. <input type="checkbox"/> 62 AND OVER</p>	<p>21. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p>

FIGURE B-14. INTERIM TELEPHONE ORDER SURVEY QUESTIONNAIRE - MONTHLY PASS BUYERS (CONT)

TICKET TELEPHONE ORDER SURVEY

THIS SURVEY FORM IS FOR PASSENGERS WHO PURCHASED TICKETS BY TELEPHONE. PLEASE FILL OUT THE COUPON AT THE END, WHICH WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS, STAMP OR TICKET BOOK.

Survey Type 2 5
Date Sent 6 - 11
Date Received 12 - 17

ALL INFORMATION WILL BE KEPT CONFIDENTIAL

<p>1. HOW MANY TICKET BOOKS DID YOU BUY WITH YOUR LAST TELEPHONE ORDER?</p> <p>1. <input type="checkbox"/> \$3 BOOKS OF 25¢ TICKETS (quantity) <u>18 19 20</u></p> <p>2. <input type="checkbox"/> \$6 BOOKS OF 50¢ TICKETS (quantity) <u>21 22 23</u></p> <p>3. <input type="checkbox"/> \$6 BOOKS OF 60¢ TICKETS (quantity) <u>24 25 26</u></p>	<p>3. WHY DID YOU PURCHASE YOUR TICKETS BY TELEPHONE? (PLEASE CHECK ALL APPROPRIATE ANSWERS.)</p> <p>1. <input type="checkbox"/> IT IS MORE CONVENIENT</p> <p>2. <input type="checkbox"/> I CANNOT TRAVEL TO A SALES OUTLET</p> <p>3. <input type="checkbox"/> OTHER (please specify) _____</p>	<p>32 46</p>
<p>2. WHICH MONTHS HAVE YOU ORDERED TICKETS BY TELEPHONE? (PLEASE CHECK ALL APPROPRIATE ANSWERS)</p> <p>1. <input type="checkbox"/> JANUARY</p> <p>2. <input type="checkbox"/> FEBRUARY</p> <p>3. <input type="checkbox"/> MARCH</p> <p>4. <input type="checkbox"/> APRIL</p> <p>5. <input type="checkbox"/> MAY</p>	<p>4. HOW DID YOU PURCHASE TICKETS BEFORE TELEPHONE PURCHASE WAS AVAILABLE?</p> <p>1. <input type="checkbox"/> AT OFFICES</p> <p>2. <input type="checkbox"/> BY MAIL</p> <p>3. <input type="checkbox"/> OTHER (please specify) _____</p> <p>4. <input type="checkbox"/> I DIDN'T PURCHASE TICKETS BEFORE</p> <p>HOW DID YOU USUALLY PAY YOUR FARE ON PT BEFORE?</p> <p>1. <input type="checkbox"/> CASH</p> <p>2. <input type="checkbox"/> DAILY PASS</p> <p>3. <input type="checkbox"/> MONTHLY PASS</p> <p>4. <input type="checkbox"/> I DIDN'T USE RT BUSES</p>	<p>27 31</p> <p>38 40</p>
	<p>5. WOULD YOU PREFER TO SEE ANY CHANGES MADE TO THE CURRENT TELEPHONE ORDER SERVICE? (PLEASE SPECIFY)</p> <p>_____</p> <p>_____</p>	<p>41 44</p>
	<p>6. WHEN DID YOU START USING TICKETS?</p> <p>_____ month _____ year</p>	<p>45 48</p>

Please continue onto next page.

FIGURE B-15. INTERIM TELEPHONE ORDER SURVEY - TICKET BUYERS

<p>7. HOW MANY DAYS DID YOU RIDE THE BUS LAST WEEK?</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 3 DAYS 6. <input type="checkbox"/> 6 DAYS</p> <p>1. <input type="checkbox"/> 1 DAY 4. <input type="checkbox"/> 4 DAYS 7. <input type="checkbox"/> 7 DAYS</p> <p>2. <input type="checkbox"/> 2 DAYS 5. <input type="checkbox"/> 5 DAYS</p>	<p>14. YOUR SEX</p> <p>1. <input type="checkbox"/> MALE 2. <input type="checkbox"/> FEMALE</p>	<p>61</p>
<p>8. HOW MANY DAYS LAST WEEK DID YOU PAY YOUR FARE USING:</p> <p>1. <input type="checkbox"/> DAILY PASS: _____ DAYS</p> <p>2. <input type="checkbox"/> TICKETS OR TOKENS: _____ DAYS</p> <p>3. <input type="checkbox"/> CASH: _____ DAYS</p>	<p>15. WHAT IS YOUR AGE?</p> <p>1. <input type="checkbox"/> UNDER 18 3. <input type="checkbox"/> 25 - 34 5. <input type="checkbox"/> 45 - 61</p> <p>2. <input type="checkbox"/> 18 - 24 4. <input type="checkbox"/> 35 - 44 6. <input type="checkbox"/> 62 AND OVER</p>	<p>62</p>
<p>9. HOW MANY ONE-WAY TRIPS TO OR FROM WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING TO WORK AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 OR 6 TRIPS 6. <input type="checkbox"/> 11 OR 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 OR 2 TRIPS 4. <input type="checkbox"/> 7 OR 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 OR 4 TRIPS 5. <input type="checkbox"/> 9 OR 10 TRIPS</p>	<p>16. WHAT IS THE APPROXIMATE RANGE OF YOUR TOTAL HOUSEHOLD INCOME?</p> <p>1. <input type="checkbox"/> UNDER \$10,001 4. <input type="checkbox"/> \$20,001-\$25,000 7. <input type="checkbox"/> \$40,001-\$50,000</p> <p>2. <input type="checkbox"/> \$10,001-\$15,000 5. <input type="checkbox"/> \$25,001-\$30,000 8. <input type="checkbox"/> OVER \$50,000</p> <p>3. <input type="checkbox"/> \$15,001-\$20,000 6. <input type="checkbox"/> \$30,001-\$40,000</p>	<p>63</p>
<p>10. HOW MANY ONE-WAY TRIPS TO OR FROM PLACES OTHER THAN WORK DO YOU MAKE ON THE BUS IN A TYPICAL WEEK? (COUNT GOING SOMEWHERE AND RETURNING AS TWO TRIPS.)</p> <p>0. <input type="checkbox"/> NONE 3. <input type="checkbox"/> 5 OR 6 TRIPS 6. <input type="checkbox"/> 11 OR 12 TRIPS</p> <p>1. <input type="checkbox"/> 1 OR 2 TRIPS 4. <input type="checkbox"/> 7 OR 8 TRIPS 7. <input type="checkbox"/> MORE THAN 12 TRIPS</p> <p>2. <input type="checkbox"/> 3 OR 4 TRIPS 5. <input type="checkbox"/> 9 OR 10 TRIPS</p>	<p>17. WHAT IS YOUR ETHNIC BACKGROUND?</p> <p>1. <input type="checkbox"/> ASIAN 3. <input type="checkbox"/> MEXICAN OR HISPANIC 5. <input type="checkbox"/> WHITE</p> <p>2. <input type="checkbox"/> BLACK 4. <input type="checkbox"/> AMERICAN INDIAN 6. <input type="checkbox"/> OTHER (please specify)</p>	<p>64</p>
<p>11. HOW LONG HAVE YOU BEEN A REGULAR RIDER ON RT?</p> <p>1. <input type="checkbox"/> LESS THAN 1 MONTH</p> <p>2. <input type="checkbox"/> 1 TO 6 MONTHS</p> <p>3. <input type="checkbox"/> 6 MONTHS TO 1 YEAR</p> <p>4. <input type="checkbox"/> 1 TO 5 YEARS</p> <p>5. <input type="checkbox"/> MORE THAN 5 YEARS</p>	<p>18. ARE THERE ANY OTHER COMMENTS OR SUGGESTIONS YOU WOULD LIKE TO MAKE TO RT?</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>57</p>
<p>12. WHICH OF THE FOLLOWING DESCRIBES YOU BEST?</p> <p>1. <input type="checkbox"/> EMPLOYED FULL TIME 3. <input type="checkbox"/> STUDENT 5. <input type="checkbox"/> RETIRED</p> <p>2. <input type="checkbox"/> EMPLOYED PART TIME 4. <input type="checkbox"/> HOMEWORKER 6. <input type="checkbox"/> UNEMPLOYED</p>	<p>THE COUPON BELOW WILL BE WORTH \$1.00 TOWARD YOUR NEXT PURCHASE OF A MONTHLY PASS/STAMP OR A TICKET BOOK WHEN VALIDATED BY RT. DO NOT REMOVE THE COUPON. FILL IT OUT AND RETURN IT WITH THE FORM. RT WILL VALIDATE THE COUPON & CREDIT THE AMOUNT TO YOUR NEXT ORDER BY TELEPHONE. THIS COUPON CAN BE REDEEMED ONLY ON ORDERS BY TELEPHONE.</p>	<p>58</p>
<p>13. DO YOU GENERALLY HAVE A VEHICLE AVAILABLE FOR YOUR USE?</p> <p>1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO</p>	<p>FARE PREPAYMENT COUPON</p> <p>GOOD FOR \$1.00 OFF ON NEXT PURCHASE</p> <p>Name _____ Validate _____</p> <p>Address _____</p> <p>City _____, CA</p> <p>Zip _____</p> <p>This coupon can be used only for purchases by telephone order.</p>	<p>59</p>
<p>49</p>	<p>50</p>	<p>51</p>
<p>52</p>	<p>53</p>	<p>54</p>
<p>55</p>	<p>56</p>	<p>57</p>
<p>58</p>	<p>59</p>	<p>60</p>

FIGURE B-15. INTERIM TELEPHONE ORDER SURVEY - TICKET BUYERS (CONT)

25 27

1 26



MONTHLY PASS/STAMP SURVEY

Please help RT to serve you better by filling out this survey form. This survey form is for passengers who used a MONTHLY PASS or STAMP. If you used cash, tickets, or a daily pass, please return this form to the survey taker and request the correct form for you.

- A. How much is your monthly pass/stamp worth, including any zone stamps?** 29
- 1 \$10.00
 - 2 \$16.00
 - 3 \$24.00
 - 4 \$34.00
- B. is some or all of the cost of your monthly pass/stamp paid for by someone else, such as your employer?** 30
- 1 No
 - 2 Yes, if yes, how much of the cost did you pay? 32-33
 - 00 Nothing 99 Other _____ (PLEASE SPECIFY)
- C. Where or how did you purchase (or receive) your monthly pass/stamp?** 34
- 1 My employer
 - 2 RT offices
 - 3 Other outlet (PLEASE SPECIFY) _____
 - 4 Mail order
 - 5 Telephone order
 - 6 Other (PLEASE SPECIFY) _____
- D. RT now offers several new ways to buy your monthly pass/stamp. Have you heard of any of these . . .** 43
- Mail order? 1 Yes 2 No
 - Telephone order? 1 Yes 2 No
 - Pre-authorized funds transfer? . . . 1 Yes 2 No
 - Automatic telephone payment? . . . 1 Yes 2 No
- E. How long have you been using a monthly pass/stamp?** 47
- 1 This is my first month 3 6 to 11 months
 - 2 1 to 5 months 4 1 to 5 years
 - 5 More than 5 years
- F. Before you started using a monthly pass/stamp, how did you usually pay your fare?** 48
- 1 Cash
 - 2 Tickets
 - 3 Daily pass
 - 4 Didn't ride RT buses
- G. During the past 12 months, how many times did you purchase a monthly pass/stamp?** 49-50
- _____ times
- 1. A. How many ONE-WAY bus trips to or from WORK did you take LAST WEEK? (Note that a round trip counts as two separate one-way trips, a trip with a transfer counts as one trip.)** 55-56
- _____ # one-way trips to/from work
- B. Do you have to change buses on your way TO WORK?** 57
- 1 No 2 Yes
- 2. A. How many ONE-WAY bus trips OTHER THAN COMMUTING TO/FROM WORK did you take last week?** 58-59
- _____ # one-way trips to/from other than work
- B. On how many of these one-way trips did you have to transfer?** 60-61
- _____ # of times had to transfer
- 3. Last September, RT changed its routes in the northeast. Think back to before last September. Has the number of weekly RT bus trips you take . . .** 62
- 1 Increased?
 - 2 Decreased?
 - 3 Remained the same

PLEASE CONTINUE TO OTHER SIDE

FIGURE B-16. POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - MONTHLY PASS USERS

- B. Because of the route changes do you now have to transfer . . .**
- 1 More often
 - 2 Less often
 - 3 About the same
- C. Did you change the way you usually pay your fare as a result of the route changes?**
- 1 No
 - 2 Yes. Before last September I usually paid by . . .
 - 1 Cash
 - 2 Ticket
 - 3 Daily pass

63

64

- 9. Your total household income**
- 1 Under \$10,001
 - 2 \$10,001 to \$15,000
 - 3 \$15,001 to \$20,000
 - 4 \$20,001 to \$25,000
 - 5 \$25,001 to \$30,000
 - 6 \$30,001 to \$40,000
 - 7 \$40,001 to \$50,000
 - 8 Over \$50,000
 - 9 Don't know

72

- 10. Are there any comments or suggestions that you would like to make to RT?**
- _____
- _____
- _____
- _____
- _____

73

THE FOLLOWING INFORMATION IS FOR STATISTICAL PURPOSES ONLY.

- 4. How long have you been a regular rider on RT?**
- 1 Less than 1 month
 - 2 1 to 5 months
 - 3 6 months to 11 months
 - 4 1 to 5 years
 - 5 More than 5 years

67

- 5. Which of the following describes you best?**
- 1 Employed full time
 - 2 Employed part time
 - 3 Student
 - 4 Homemaker
 - 5 Retired
 - 6 Unemployed

68

- 6. Do you usually have a vehicle available for your use?**
- 1 Yes
 - 2 No

69

- 7. Sex**
- 1 Male
 - 2 Female

70

- 8. Age**
- 1 Under 18
 - 2 18-24
 - 3 25-34
 - 4 35-44
 - 5 45-61
 - 6 62 or over

71

AND FINALLY . . . PLEASE HELP US FURTHER — This month, we will be conducting a telephone survey of some of our passengers to find out more about how well our new pass/stamp and ticket distribution programs are working. Please volunteer to participate in this survey. It is important that we be able to talk with a representative group of passengers who use a monthly pass or stamp.

74

ALL THOSE WHO VOLUNTEER TO PARTICIPATE IN THIS SURVEY WILL RECEIVE A \$1.00 COUPON, GOOD TOWARDS PURCHASE OF A MONTHLY PASS/STAMP, REGARDLESS OF WHETHER OR NOT THEY ARE CONTACTED.

ALL INFORMATION WILL BE KEPT STRICTLY CONFIDENTIAL. Please help us out by giving us the following information:

Name: _____

Address: _____

Telephone number: _____

Preferred time of week for our surveyors to contact you: _____

Day of week: _____ Time of day: _____ AM PM

THANK YOU FOR YOUR HELP IN COMPLETING THIS SURVEY. PLEASE RETURN THE COMPLETED FORM TO THE SURVEY TAKER BEFORE YOU LEAVE THE BUS.

PLEASE FILL OUT BOTH SIDES

25 27

28



TICKET SURVEY

Please help RT to serve you better by filling out this survey form. This survey form is for passengers who paid a single fare with TICKETS. If you used cash only, a daily pass, or a monthly pass/stamp, please return this form to the survey taker and request the correct form for you.

- A. What fare did you just now pay?**
- 1 25¢
 - 2 35¢
 - 3 50¢
 - 4 60¢
 - 5 \$1.00
 - 6 \$1.10
 - 7 Other _____ (PLEASE SPECIFY)
- B. How many days last week did you pay your fare using ...**
- Daily pass: _____ days
- Tickets only (no cash): _____ days
- Tickets and cash: _____ days
- Cash only (no tickets): _____ days
- C. Where or how did you purchase (or receive) your tickets?**
- 1 My employer
 - 2 RT offices
 - 3 Other outlet (PLEASE SPECIFY) _____
 - 4 Mail order
 - 5 Telephone order
 - 6 Other (PLEASE SPECIFY) _____
- D. RT now offers several new ways to buy your tickets. Have you heard of any of these ...**
- Mail order? 1 Yes 2 No
 - Telephone order? 1 Yes 2 No
 - Pre-authorized funds transfer? ... 1 Yes 2 No
 - Automatic telephone payment? ... 1 Yes 2 No
- E. How long have you been using tickets?**
- 1 Less than 1 month
 - 2 1 to 5 months
 - 3 6 to 11 months
 - 4 1 year or more
- F. Before you started using tickets, how did you usually pay your fare?**
- 1 Cash
 - 2 Monthly pass
 - 3 Daily pass
 - 4 Tokens
 - 5 Didn't ride RT buses
- G. How many ticket books did you buy last month?**
- \$3 books of 25¢ tickets, _____ quantity
 - \$6 books of 50¢ tickets, _____ quantity
 - \$6 books of 60¢ tickets, _____ quantity
- 1. A. How many ONE-WAY bus trips to or from WORK did you take LAST WEEK? (Note that a round trip counts as two separate one-way trips, a trip with a transfer counts as one trip.)** _____ # one-way trips to/from work
- B. Do you have to change buses on your way TO WORK?**
- 1 No
 - 2 Yes
- 2. A. How many ONE-WAY bus trips OTHER THAN COMMUTING TO/FROM WORK did you take last week?** _____ # of times had to transfer
- B. On how many of these one-way trips did you have to transfer?** _____ # of times had to transfer
- 3. Last September, RT changed its routes in the northeast.**
- A. Think back to before last September. Has the number of weekly RT bus trips you take ...**
- 1 Increased?
 - 2 Decreased?
 - 3 Remained the same

PLEASE CONTINUE TO OTHER SIDE

FIGURE B-17. POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - TICKET USERS

- B. Because of the route changes do you now have to transfer . . .**
- 1 More often
 2 Less often
 3 About the same
- C. Did you change the way you usually pay your fare as a result of the route changes?**
- 1 No
 2 Yes. Before last September I usually paid by . . .
- 1 Cash
 - 3 Daily pass
 - 4 Monthly pass

63

64

65

THE FOLLOWING INFORMATION IS FOR STATISTICAL PURPOSES ONLY.

- 4. How long have you been a regular rider on RT?**
- 1 Less than 1 month
 2 1 to 5 months
 3 6 months to 11 months
 4 1 to 5 years
 5 More than 5 years
- 5. Which of the following describes you best?**
- 1 Employed full time
 2 Employed part time
 3 Student
 4 Homemaker
 5 Retired
 6 Unemployed
- 6. Do you usually have a vehicle available for your use?**
- 1 Yes 2 No
- 7. Sex**
- 1 Male 2 Female
- 8. Age**
- 1 Under 18
 2 18-24
 3 25-34
 4 35-44
 5 45-61
 6 62 or over

67

68

69

70

71

PLEASE FILL OUT BOTH SIDES

- 9. Your total household income**
- 1 Under \$10,001
 2 \$10,001 to \$15,000
 3 \$15,001 to \$20,000
 4 \$20,001 to \$25,000
 5 \$25,001 to \$30,000
 6 \$30,001 to \$40,000
 7 \$40,001 to \$50,000
 8 Over \$50,000
 9 Don't know

72

- 10. Are there any comments or suggestions that you would like to make to RT?**
- _____
- _____
- _____
- _____
- _____
- _____
- _____

73

AND FINALLY . . . PLEASE HELP US FURTHER — This month, we will be conducting a telephone survey of some of our passengers to find out more about how well our new pass/stamp and ticket distribution programs are working. Please volunteer to participate in this survey. It is important that we be able to talk with a representative group of passengers who use tickets.

74

ALL THOSE WHO VOLUNTEER TO PARTICIPATE IN THIS SURVEY WILL RECEIVE \$1.00 IN TICKETS, REGARDLESS OF WHETHER OR NOT THEY ARE CONTACTED.

ALL INFORMATION WILL BE KEPT STRICTLY CONFIDENTIAL. Please help us out by giving us the following information:

Name: _____

Address: _____

Telephone number: _____

Preferred time of week for our surveyors to contact you: _____

Day of week: _____ Time of day: _____ AM PM

THANK YOU FOR YOUR HELP IN COMPLETING THIS SURVEY. PLEASE RETURN THE COMPLETED FORM TO THE SURVEY TAKER BEFORE YOU LEAVE THE BUS.

FIGURE B-17. POST-IMPLEMENTATION ON-BOARD SURVEY QUESTIONNAIRE - TICKET USERS (CONT)

DAILY PASS SURVEY



Please help RT to serve you better by filling out this survey form. This survey form is for passengers who used or bought a DAILY PASS. If you used cash, tickets, or a monthly pass/stamp, please return this form to the survey taker and request the correct form for you.

20-23
 25
 26
 27
 28
 29

A. How much did you pay for your daily pass today?

1 \$1.25
 2 \$1.75

29

B. How many days last week did you pay your fare using ...

Daily pass: _____ days
 Tickets only (no cash): _____ days
 Tickets and cash: _____ days
 Cash only (no tickets): _____ days

31

32

33

34

C. Did you know that RT offered tickets?

1 No
 2 Yes, but I didn't use them because ...
 (Please check all appropriate answers)
 1 I don't like to pay in advance
 2 It is inconvenient for me to buy them
 3 I am afraid that I might lose them
 4 I would have to buy several differently priced tickets
 5 I ran out of tickets; I will buy more
 6 Other _____
 (PLEASE SPECIFY)

35

37

38

39

40

D. RT now offers several new ways to buy monthly passes/stamps and tickets. Have you heard of any of these ...

Mail order? 1 Yes 2 No
 Telephone order? 1 Yes 2 No
 Pre-authorized funds transfer? ... 1 Yes 2 No
 Automatic telephone payment? ... 1 Yes 2 No

43

44

45

46

1. A. How many ONE-WAY bus trips to or from WORK did you take LAST WEEK? (Note that a round trip counts as two separate one-way trips, a trip with a transfer counts as one trip.)

_____ # one-way trips to/from work

55-56

B. Do you have to change buses on your way TO WORK?

1 NO 2 YES

57

2. A. How many ONE-WAY bus trips OTHER THAN COMMUTING TO/FROM WORK did you take last week?

_____ # one-way trips to/from other than work

56-59

B. On how many of these one-way trips did you have to transfer?

_____ # of times had to transfer

60-61

3. Last September, RT changed its routes in the northeast.

A. Think back to before last September. Has the number of weekly RT bus trips you take ...

1 Increased?
 2 Decreased?
 3 Remained the same?

62

B. Because of the route changes do you now have to transfer ...

1 More often
 2 Less often
 3 About the same

63

C. Did you change the way you usually pay your fare as a result of the route changes?

1 No
 2 Yes. Before last September I usually paid by ...

1 Cash
 2 Tickets
 4 Monthly pass

64

65

PLEASE CONTINUE TO OTHER SIDE

2863

25 26 27

28 4

CASH SURVEY



Please help RT to serve you better by filling out this survey form. This survey form is for passengers who paid a single CASH fare. If you used tickets, a daily pass, or a monthly pass/stamp, please return this form to the survey taker and request the correct form for you.

A. What fare did you just now pay?

- 1 25¢
- 2 35¢
- 3 50¢
- 4 60¢
- 5 \$1.00
- 6 \$1.10
- 7 Other _____

29

55-56

B. How many days last week did you pay your fare using ...

(PLEASE SPECIFY)

- Daily pass: _____ days
- Tickets only (no cash): _____ days
- Tickets and cash: _____ days
- Cash only (no tickets): _____ days

31

32

33

34

55-56

C. Did you know that RT offered tickets?

- 1 No
- 2 Yes, but I didn't use them because ...
(Please check all appropriate answers)
 - 1 I don't like to pay in advance
 - 2 It is inconvenient for me to buy them
 - 3 I am afraid that I might lose them
 - 4 I would have to buy several differently priced tickets
 - 5 I ran out of tickets; I will buy more
 - 6 Other _____

35

37

38

39

40

60-61

D. RT now offers several new ways to buy monthly passes/stamps and tickets. Have you heard of any of these ...

- Mail order? 1 Yes 2 No
- Telephone order? 1 Yes 2 No
- Pre-authorized funds transfer? 1 Yes 2 No
- Automatic telephone payment? ... 1 Yes 2 No

43

44

45

46

1. A. How many ONE-WAY bus trips to or from WORK did you take LAST WEEK? (Note that a round trip counts as two separate one-way trips, a trip with a transfer counts as one trip.)

_____ # one-way trips to/from work

B. Do you have to change buses on your way TO WORK?

- 1 No
- 2 Yes

30

57

2. A. How many ONE-WAY bus trips OTHER THAN COMMUTING TO/FROM WORK did you take last week?

_____ # one-way trips to/from other than work

B. On how many of these one-way trips did you have to transfer?

_____ # of times had to transfer

34

60-61

3. Last September, RT changed its routes in the northeast.

A. Think back to before last September. Has the number of weekly RT bus trips you take ...

- 1 Increased?
- 2 Decreased?
- 3 Remained the same?

37

38

39

40

62

B. Because of the route changes do you now have to transfer ...

- 1 More often
- 2 Less often
- 3 About the same

40

63

C. Did you change the way you usually pay your fare as a result of the route changes?

- 1 No
- 2 Yes. Before last September I usually paid by ...
 - 2 Ticket
 - 3 Daily pass
 - 4 Monthly pass

43

44

45

46

64

65

PLEASE CONTINUE TO OTHER SIDE

Surveyors handed out questionnaires on 103 bus trips, which were spread out through the RT service area. A total of 3,420 passengers boarded these buses; there were 1,561 usable questionnaires out of a total of 1,827 returned. The breakdown by fare type is as follows:

Monthly pass	482
Tickets	97
Daily pass	511
Cash	<u>471</u>
Total	1,561

B.2.5 Post-Implementation Telephone Survey

This survey was intended to measure the characteristics of TFP users by distribution method used (outlet, mail order, etc.), and their awareness of and attitudes toward the different TFP distribution methods. Mail order, telephone order, ATP, and PAFT users were solicited by letter. They were offered a coupon worth \$1.00 toward TFP purchase if they volunteered for the survey.² Outlet users were solicited from the on-board survey; every monthly pass and ticket user who received survey form was offered a \$1.00 TFP purchase coupon merely for volunteering for the telephone survey.³ Former mail order and telephone order users were also solicited for the survey.

The survey questionnaire was designed for all types of persons surveyed. An individual questionnaire was made up for each user; the groups of questions used in each questionnaire depended on the type of user, as shown in Table B-1.

²PAFT and ATP users who volunteered for the survey received cash payments because it was not possible for them to use a coupon when paying for their TFP purchases.

³Of the usable returned questionnaires on the on-board survey, 269 monthly pass users (56%) and 61 ticket users (63%) volunteered.

TABLE B-1
POST-IMPLEMENTATION TELEPHONE SURVEY QUESTION TYPES

<u>Question Type^a</u>	<u>User Type</u>
PASS	Monthly pass users
TICKET	Ticket users
MAIL	Mail order customers
MAIL-FOR	Former mail order customers
TEL	Telephone order customers
TEL-FOR	Former telephone order customers
ATP	ATP customers
PAFT	PAFT customers
ALL	All users

^aCorresponds to question number prefix on questionnaire.

The survey sample size was intended to be 800. In fact, not all persons who volunteered for the survey could be reached because of not being at home, giving a wrong telephone number or no telephone number or refusing to be interviewed when contacted by telephone. Interviewers attempted to reach everyone who volunteered. In all, 777 persons were interviewed. The breakdown by type is shown in Table B-2. The survey questionnaire is shown in Figure B-20.

TABLE B-2
POST-IMPLEMENTATION TELEPHONE SURVEY
COMPLETED INTERVIEWS BY TYPE

<u>TFP Purchase Method</u>	<u>Monthly Pass</u>	<u>TFP Item Purchased</u>		<u>TOTAL</u>
		<u>Tickets</u>	<u>Pass & Tickets</u>	
Outlets	298	62	---	360
Mail order	162	52	18	232
Telephone order	30	9	1	40
ATP	2	--	--	2
PAFT	9	--	--	9
Mail order--former users	68	20	3	91
Telephone order--former users	29	11	3	43
TOTAL	598	154	25	777

May I please speak with Person's name from first page.

Hello, my name is (your name) from Sacramento Regional Transit. You recently volunteered to participate in a telephone survey of monthly pass, stamp, and ticket users. We are surveying those persons who actually use passes, stamps, or tickets. If someone else in your household is the actual user, could we please talk with that person? Otherwise, could you answer for him or her?

If the person is busy now, ask:

When would it be convenient to call you back?

(Record here and on call control record)

PASS

PASS - 1 Do you now use a monthly pass?

- 1 Yes -- Continue with PASS-2A
2 No -- Skip to TICKET-1

8

PASS - 2A How much does your monthly pass/stamp cost, including the cost of any zone stamps?

- 1 \$10.00 3 \$24.00
2 \$16.00 4 \$34.00

9

PASS - 2B Is any of the cost of your monthly pass/stamp paid for by someone else, such as your employer?

If person answers parent or family, the answer is NO.

- 1 Yes--Continue with PASS-2C
2 NO---Skip to PASS-3

10

PASS - 2C How much of the cost do you pay?

\$ _____ (Round off to nearest dollar amount)

11 12

PASS - 3 Before you started using a monthly pass/stamp, how did you usually pay your fare on RT?

- 1 Tickets/Tokens 3 Cash
2 Daily pass 4 Didn't ride RT buses

13

14

PASS - 4 How long have you been buying a monthly pass/stamp?

- 1 Less than 6 months
- 2 6 months to 1 year
- 3 1 to 5 years
- 4 More than 5 years

15

PASS - 5A Do you usually purchase a monthly pass/stamp every month?

- 1 Yes--Skip to TICKET-1
- 2 No--Continue with PASS-5B

16

PASS - 5B Why not? Check all that apply.

- 1 School pass--Skip to TICKET-1
- 2 Not economical to use every month
- 3 Sometimes forget to buy
- 4 Don't ride the bus enough on some months
- 5 Other _____
- 6 Other _____

Continue with PASS-4C

17

18

PASS - 5C During those months when you don't buy a monthly pass/stamp, how do you usually pay for your fare on RT?

- 1 Cash
- 2 Daily pass
- 3 Tickets
- 4 Don't ride RT buses

20

21

TICKET

TICKET - 1 Do you now use tickets?

1 Yes--Continue with TICKET-2

2 No--Skip to next set of questions (OUTLET, MAIL, TEL, PAFT, or ATP)

22

TICKET - 2 How many books of tickets did you buy in April?

\$3 books of 25¢ tickets, _____ quantity

\$6 books of 50¢ tickets, _____ quantity

\$6 books of 60¢ tickets, _____ quantity

23 24

25 26

27 28

TICKET - 3 How long have you been using tickets?

1 Less than 6 months

3 More than 1 year

2 6 months to 1 year

29

TICKET - 4 Just before you started using tickets, how did you usually pay your fare?

1 Monthly pass

4 Cash

2 Daily pass

5 Didn't ride RT buses

3 Tokens

30

MAIL-FOR-1 Do you still ride RT buses?

- 1 Yes--Continue with MAIL-FOR-2
- 2 No--Skip to MAIL-FOR-4A

MAIL-FOR-2 How do you now usually pay your fare on RT?

- 1 Monthly pass/stamp
- 2 Tickets
- 3 Daily pass
- 4 Cash
- 5 Other _____

If answer is monthly pass/stamp or tickets, continue with MAIL-FOR-3. Otherwise, skip to MAIL-FOR-4A.

MAIL-FOR-3 Where or how do you now buy your (monthly pass/stamp or tickets)?

- 1 RT outlets
- 2 Other public outlet
- 3 Private outlet
- 4 Employer
- 5 Other _____

MAIL-FOR-4A Was there anything about mail order service that caused you to stop using it?

- 1 Yes--Continue with MAIL-FOR-4B _____
- 2 No--Skip to MAIL-FOR-5A

34

MAIL-FOR-4B What things? Check all that apply.

- 1 Inconvenient
- 2 Took too long to receive orders in mail
- 3 Orders received late
- 4 Orders lost in mail
- 5 Other _____
- 6 Other _____

35

36

37

38

MAIL-FOR-5A

Are there any other reasons why you no longer use mail order, such as riding the bus less often?

1 Yes

2 No

If yes, ask:

39

MAIL-FOR-5B

What reasons? Check all that apply.

1 Riding the bus less often

2 Moved

3 Changed workplace/school location

4 No longer using monthly pass or tickets

5 Other _____

6 Other _____

40

41

42

43

TEL-FOR-4A Was there anything about telephone order service that caused you to stop using it?

- 1 Yes--Continue with TEL-FOR-4B
- 2 No--Skip to TEL-FOR-5A

47

TEL-FOR-4B What things? Check all that apply.

- 1 Inconvenient
- 2 Took too long to receive orders in mail
- 3 Orders received late
- 4 Orders lost in mail
- 5 No longer use credit card
- 6 Other _____
- 7 Other _____

48

49

50

51

TEL-FOR-5A Are there any other reasons why you no longer use telephone order, such as riding the bus less often?

1 Yes

2 No

If yes, ask:

52

TEL-FOR-5B What reasons? Check all that apply.

1 Riding the bus less often

2 Moved

3 Changed workplace/school location

4 No longer using monthly pass or tickets

5 Other _____

6 Other _____

53

54

55

56

OUTLET

OUTLET-1 Where do you usually purchase or receive your monthly pass/stamp or tickets?

- 1 RT office
- 2 Other public outlet
- 3 Employer
- 4 School
- 5 Other _____

57

OUTLET-2A How would you pay your fare on RT if outlets were no longer available?

- 1 Monthly pass/stamp
- 2 Tickets
- 3 Daily pass
- 4 Cash
- 5 Would not ride RT buses

58

If answer is monthly pass/stamp or tickets, ask:

OUTLET-2B How would you purchase your (monthly pass/stamp or tickets)?

- 1 Mail order
- 2 Telephone order
- 3 Automatic telephone payment
- 4 Pre-authorized funds transfer

59

OUTLET-3A RT offers mail-order as a way to purchase monthly passes, stamps, and tickets.
Have you heard of this method?

1 Yes

2 No

60

If yes, ask:

OUTLET-3B What disadvantages do you see in this method? Check all that apply.

1 Less convenient than what I am using now

2 Too complicated to use

3 I do not have enough information about this method

4 Too inflexible; have to order every month

5 Too long a turnaround time

6 Risk of losing items in mail

7 Other _____

8 Other _____

61

62

63

64

65

OUTLET-4A You can also use telephone order to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
2 No

66

If yes, ask:

OUTLET-4B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
2 Too complicated to use
3 I do not have enough information about this method
4 Too inflexible; have to order every month
5 Too long a turnaround time
6 Risk of losing items in mail
7 Other _____
8 Other _____

67

68

69

70

71

OUTLET-5A Pre-authorized funds transfer is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
2 No

72

If yes, ask:

OUTLET-5B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
2 Too complicated to use
3 I do not have enough information about this method
4 Too inflexible; have to order every month
5 Too long a turnaround time
6 Risk of losing items in mail
7 Other _____
8 Other _____

73

74

75

76

77

OUTLET-6A Automatic telephone payment is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
- 2 No

78

If yes, ask:

OUTLET-6B What disadvantages do you see in this method? **Check all that apply.**

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

79

80

81

82

83

MAIL

MAIL-1 When did you first begin to use RT's mail order service?

Month 84 85
Year 86 87

MAIL-2 Just before you started using mail order, how did you usually pay your fare on RT?

- 1 Monthly pass/stamp
 - 2 Tickets
 - 3 Daily pass
 - 4 Cash
 - 5 Didn't ride RT buses
- 88

MAIL-3 If monthly pass/stamp or tickets, continue with MAIL-3. Otherwise, skip to MAIL-4.

MAIL-3 Where or how did you buy your (pass/stamp,ticket) before using mail order?

- 1 RT outlet
 - 2 Other public outlet
 - 3 Private outlet
 - 4 Employer
 - 5 School
 - 6 Telephone order
 - 7 Other _____
- 89

MAIL-4 Why do you use mail order to purchase your monthly pass, stamp, or tickets?
Check all responses that apply.

- 1 Convenience 4 Other _____
2 Can't travel to outlet 5 Other _____
3 Outlet hours
- 90
91
92

MAIL-5 About how many days does it take for you to receive your order once you have sent it in?
_____ # days

93 94

MAIL-6A Are you now buying a monthly pass or stamp by mail order?

- 1 Yes--Continue with MAIL-6B
2 No--Skip to MAIL-7A
- 95

MAIL-6B Have you ever received your order later than the first of the month?

- 1 Yes--Continue with MAIL-6C
2 No--Skip to MAIL-7A
- 96

MAIL-6C How many times has this happened?

_____ # of times

97 98

MAIL-7A How would you pay your fare on RT if mail order were not available?

1 Monthly pass/stamp 4 Cash

2 Tickets 5 Would not ride RT buses

3 Daily pass

99

If answer to MAIL-7A was monthly pass/stamp or tickets, ask:

MAIL-7B And where or how would you purchase your (monthly pass/stamp or tickets)?

1 RT outlet 6 Telephone order

2 Other public outlet 7 Automatic telephone payment

3 Private outlet 8 Pre-authorized funds transfer

4 Employer 9 Other _____

5 School

100

MAIL-8A RT offers telephone order as a way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
- 2 No

101

If yes, ask:

MAIL-8B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

102

103

104

105

106

MAIL-9A Pre-authorized funds transfer is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
- 2 No

107

If yes, ask:

MAIL-9B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

108

109

110

111

112

MAIL-10A Automatic telephone payment is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
2 No

113

If yes, ask:

MAIL-10B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
2 Too complicated to use
3 I do not have enough information about this method
4 Too inflexible; have to order every month
5 Too long a turnaround time
6 Risk of losing items in mail
7 Other _____
8 Other _____

114

115

116

117

118

TEL

TEL-1 When did you first begin to use RT's telephone order service?

Month 120 121
122 123

Month / Year

TEL-2 Just before you started using telephone order, how did you usually pay your fare on RT?

- 1 Monthly pass/stamp
- 2 Tickets
- 3 Daily pass
- 4 Cash
- 5 Didn't ride RT buses

124

If monthly pass/stamp or tickets, continue with TEL-3. Otherwise, skip to TEL-4.

TEL-3 Where or how did you buy your (pass/stamp, ticket) before using telephone order?

- 1 RT outlet
- 2 Other public outlet
- 3 Private outlet _____
- 4 Employer
- 5 School
- 6 Mail order
- 7 Other _____

125

TEL-4 Why do you use telephone order to purchase your monthly pass/stamp or tickets?
Check all responses that apply.

- 1 Convenience 4 Other _____
2 Can't travel to outlet 5 Other _____
3 Outlet hours
- 126
127
128

TEL-5 About how many days does it take for you to receive your order once you have called it in?
_____ # days

129 130

TEL-6A Are you now buying a monthly pass or stamp by telephone order?

- 1 Yes--Continue with TEL-6B 131
2 No--Skip to TEL-7A

TEL-6B Have you ever received your pass later than the first of the month?

- 1 Yes--Continue with TEL-6C 132
2 No--Skip to TEL-7

TEL-6C How many times has this occurred?

_____ times 133 134

TEL-7A How would you pay your fare on RT if telephone order were not available?

- 1 Monthly pass/stamp
- 2 Tickets
- 3 Daily pass
- 4 Cash
- 5 Would not ride RT buses

135

If answer to TEL-7A was monthly pass/stamp or tickets, ask:

TEL-7B And where or how would you purchase your (monthly pass/stamp or tickets)?

- 1 RT outlet
- 2 Other public outlet
- 3 Private outlet
- 4 Employer
- 5 School
- 6 Mail order
- 7 Pre-authorized funds transfer
- 8 Automatic telephone payment
- 9 Other _____

136

TEL-8A RT offers mail-order as a way to purchase monthly passes, stamps, and tickets.
Have you heard of this method?

- 1 Yes
- 2 No

If yes, ask:

TEL-8B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

TEL-9A Pre-authorized funds transfer is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
- 2 No

143

If yes, ask:

TEL-9B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

144

145

146

147

148

TEL-10A Automatic telephone payment is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
- 2 No

If yes, ask:

TEL-10B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

ATP

ATP-1 When did you first begin to use RT's automatic telephone payment service?

Month 155 156
Year 157 158

ATP-2 Just before you started using automatic telephone payment, how did you usually pay your fare on RT?

- 1 Monthly pass/stamp
 - 2 Tickets
 - 3 Daily pass
 - 4 Cash
 - 5 Didn't ride RT buses
- 159

If monthly pass/stamp or tickets, continue with ATP-3. Otherwise, skip to ATP-4.

ATP-3 Where or how did you buy your (pass/stamp, ticket) before using automatic telephone payment?

- 1 RT outlets
 - 2 Other public outlet
 - 3 Private outlet
 - 4 Employer
 - 5 School
 - 6 Mail order
 - 7 Telephone order
 - 8 Other _____
- 160

ATP-4 Why do you use automatic telephone payment to purchase your monthly pass or stamp?
Check all responses that apply.

- 1 Convenience
2 Can't travel to outlet
3 Outlet hours
4 Other _____
5 Other _____

161

162

163

ATP-5 About how many days does it take for you to receive your monthly pass or stamp once you have placed your order?

_____ # days

164 165

ATP-6A Have you ever received your pass or stamp later than the first of the month?

- 1 Yes--Continue with ATP-6B
2 No--Skip to ATP-7A

166

ATP-6B How many times has this happened?

_____ # of times

167 168

ATP-7A How would you pay your fare on RT if automatic telephone payment were not available?

- 1 Monthly pass/stamp
- 2 Tickets
- 3 Daily pass
- 4 Cash
- 5 Would not ride RT buses

If answer to ATP-7A was monthly pass/stamp or tickets, ask:

ATP-7B And where or how would you purchase your (monthly pass/stamp or tickets)?

- 1 RT outlet
- 2 Other public outlet
- 3 Private outlet
- 4 Employer
- 5 School
- 6 Mail order
- 7 Telephone order
- 8 Pre-authorized funds transfer
- 9 Other _____

ATP-8A RT offers mail-order as a way to purchase monthly passes, stamps, and tickets.
Have you heard of this method?

- 1 Yes
- 2 No

171

If yes, ask:

ATP-8B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

172

173

174

175

ATP-9A Telephone order is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
2 No

176

If yes, ask:

ATP-9B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
2 Too complicated to use
3 I do not have enough information about this method
4 Too inflexible; have to order every month
5 Too long a turnaround time
6 Risk of losing items in mail
7 Other _____
8 Other _____

177

178

179

180

181

ATP-10A Pre-authorized funds transfer is another way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

- 1 Yes
- 2 No

182

If yes, ask:

ATP-10B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

183

184

185

186

187

PAFT

PAFT-1 When did you first begin to use RT's pre-authorized funds transfer service?

Month 188 189
Year 190 191

PAFT-2 Just before you started using pre-authorized funds transfer, how did you usually pay your fare on RT?

- 1 Monthly pass/stamp
- 2 Tickets
- 3 Daily pass
- 4 Cash
- 5 Didn't ride RT buses

192

PAFT-3 If monthly pass/stamp or tickets, continue with PAFT-3. Otherwise, skip to PAFT-4.

PAFT-3 Where or how did you buy your (pass/stamp, ticket) before using automatic telephone payments?

- 1 RT outlets
- 2 Other public outlets
- 3 Private outlet
- 4 Employer
- 5 School
- 6 Mail order
- 7 Telephone order
- 8 Other

193

PAFT-4 Why did you use pre-authorized funds transfer to purchase your monthly pass or stamps?
Check all responses that apply.

- 1 Convenience
- 2 Can't travel to outlet
- 3 Outlet hours
- 4 Other _____
- 5 Other _____

194

PAFT-5 About what day of the month do you usually receive your pass or stamps?

_____ day of month

195 196

PAFT-6A Have you ever received your pass or stamp later than the first of the month?

- 1 Yes--Continue with PAFT-6B
- 2 No--Skip to PAFT-7A

197

PAFT-6B How many times has this happened?

_____ # of times

198 199

PAFT-7A RT offers mail-order as a way to purchase monthly passes, stamps, and tickets.
Have you heard of this method?

- 1 Yes
2 No

200

If yes, ask:

PAFT-7B What disadvantages do you see in this method? Check all that apply.

- 1 Less convenient than what I am using now
2 Too complicated to use
3 I do not have enough information about this method
4 Too inflexible; have to order every month
5 Too long a turnaround time
6 Risk of losing items in mail
7 Other _____
8 Other _____

201

202

203

204

205

PAFT-8A Telephone order is another way to purchase monthly passes, stamps, and tickets.
Have you heard of this method?

- 1 Yes
- 2 No

206

If yes, ask:

PAFT-8B What disadvantages do you see in this method? **Check all that apply.**

- 1 Less convenient than what I am using now
- 2 Too complicated to use
- 3 I do not have enough information about this method
- 4 Too inflexible; have to order every month
- 5 Too long a turnaround time
- 6 Risk of losing items in mail
- 7 Other _____
- 8 Other _____

207

208

209

210

211

PAFT-9A RT offers automatic telephone payment as a way to purchase monthly passes, stamps, and tickets. Have you heard of this method?

1 Yes

2 No

212

If yes, ask:

PAFT-9B What disadvantages do you see in this method? Check all that apply.

1 Less convenient than what I am using now

2 Too complicated to use

3 I do not have enough information about this method

4 Too inflexible; have to order every month

5 Too long a turnaround time

6 Risk of losing items in mail

7 Other _____

8 Other _____

213

214

215

216

217

These next questions are about your travel on Regional Transit buses.

ALL - 1 How long have you been a regular rider on Regional Transit?

- 1 Less than 6 months 3 6 months to 1 year
2 6 to 11 months 4 1 to 5 years

218

ALL - 2 How many days did you ride the bus last week?

_____ # of days

219

Now I would like to ask about the number of one-way trips you usually take on the bus. Please note that a round trip counts as two separate one-way trips. A trip with a transfer counts as one trip.

ALL - 3A How many one-way bus trips to or from work did you take last week?

_____ # one-way bus trips to/from work

220 221

If answer is zero or none, skip to ALL - 3C.

ALL - 3B Do you have to change buses on your way to work?

- 1 Yes 2 No

222

ALL - 3C How many one-way bus trips other than to or from work did you take last week?

_____ # one-way non-work trips

223 224

If answer is zero or none, skip to ALL-4.

ALL - 3D On how many of these one-way bus trips did you have to change buses?

_____ # of one-way trips where had to change buses

225

The following questions are for statistical purposes only:

ALL - 4 How long have you lived at your current address?

1 Less than 6 months 3 1 to 5 years

2 6 to 11 months 4 More than 5 years

226

ALL - 5 How many vehicles in running condition do you have in your household?

0 None

2 Two

1 One

3 Three or more

227

ALL - 6A How many persons are there in your household?

228 229

ALL - 6B How many of these persons have valid driver's licenses?

230 231

ALL - 7A What is your occupation?

- 1 Full-time employed
 - 2 Part-time employed
 - 3 Student
 - 4 Homemaker
 - 5 Retired
 - 6 Unemployed
 - 7 Other
-

If employed or student, ask:

ALL - 7B And how do you usually get to work or school?

- 1 Drive alone
 - 2 Carpool
 - 3 Get ride from family/friends/co-workers
 - 4 RT buses
 - 5 Walk
 - 6 Other
-

ALL - 8

What is your age?

- 1 Under 18
- 2 18-24
- 3 25-34
- 4 35-44
- 5 45-61
- 6 62 or over

234

ALL - 9

Sex?

- 1 Male
- 2 Female

235

ALL - 10

And finally, what is the approximate total yearly income of your household?
I will read you a list of ranges. Please stop me when I reach the right one:

- 1 \$10,000 or under
- 2 \$10,001 to \$15,000
- 3 \$15,001 to \$20,000
- 4 \$20,001 to \$25,000
- 5 \$25,001 to \$30,000
- 6 \$30,000 to \$40,000
- 7 \$40,001 to \$50,000
- 8 Over \$50,000
- 9 Don't know
- 10 Refused

236

HE 18.5 . A
MTA- 85-1
Reinke, Da
Transit fan
distributi

Form DOT F 1720.
FORMERLY FORM DOT

DOT LIBRARY



00353132